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## ORIGINAL DEPARTMENT.

### LECTURE.

#### ASYSTOLISM.

Delivered at the Hôtel Dieu.

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GENTLEMEN—I wish to call your attention again, to-day, to two patients, one of whom died a few days since.

The autopsy was made before you, and as you may remember, there existed chronic lesions of the lungs.

Again, toward the close of life the patient presented somewhat remarkable delirious symptoms, which merit careful consideration. The other patient, now before you, has heart disease, and presents also chronic pulmonary lesions. I will commence my lecture by the consideration of her clinical history.

The patient is thirty-nine years of age, and entered the hospital August 30th. She suffers, as you observe, from intense dyspnoea. The respirations are short and very frequent, fifty-two per minute. The face presents a generalized yellowish tinge, but the cheeks have the bluish coloration of cyanosis, rendered more evident by the jaundiced color of the rest of the face. The eyelids are œdematous; the neck appears tumefied; the lips have a well marked, bluish, cyanotic aspect. The venous system is dilated over the entire body, in the neck, at the upper part of the chest and in the hands and feet, which are cyanosed and cold. The lower limbs also are considerably swollen and œdematous; all the natural prominences have disappeared, and the slightest

pressure with the finger causes pitting. The patient complains of vertigo and ringing in the ears. At night she is obliged to remain propped up with pillows, and enjoys but a broken rest, for her slumbers are disturbed by terrifying dreams. From time to time she suffers from intense pain in the right hypochondrium. This pain, not limited to any special point, is augmented by pressure over the hepatic region and extends at the back to the right shoulder. The pulse is small, miserable, and irregular, hardly perceptible, and sometimes intermittent. The heart impulse is diminished, and sometimes even it appears entirely absent, or at least so feeble as to be scarcely perceptible.

The cardiac dullness is somewhat augmented transversely. The heart sounds are so feeble as to be distinguished only with difficulty, but there is no evidence of murmur. The second sound is more marked than usual over the pulmonary artery.

There is no astyolic murmur at the right of the sternum or near the epigastric region. The jugular veins are prominent, but there is no venous pulse, nor is there any trace of hepatic pulsation.

The patient is not only in a veritable state of orthopnoea, she has also abundant muco-purulent and yellowish expectoration.

The methodic examination of the chest gives the following results: Over the sub- and supraspinal fossæ on the left side there is almost absolute dullness on percussion over a space of about fifteen centimeters. At the central part of this side of the chest the sound is normal, perhaps slightly tympanitic; at the extreme lower part is a narrow zone of dullness.

Percussion over the anterior aspect gives the same results as posteriorly; dullness at the upper part of the chest, but normal sound over the remainder. On the right side of the chest the *sonority* is normal over all the superior part, before and behind; there is a zone of slight dullness at the inferior part posteriorly.

On auscultation tubular breathing is found on the left side, at the points where dullness is most marked; it is most evident with the inspiration.

There exists, also, bronchophony at these points, but no râles are present, even when the patient coughs. On the contrary, over the rest of the chest sonorous and sibilant as well as subcrepitant râles are found. These last are most marked inferiorly and particularly on the right side.

Anteriorly, blowing respiration is found under the left clavicle, and râles similar to those detected posteriorly, but much less numerous, are found over the remainder of this aspect of the chest.

The abdomen is soft, somewhat tympanitic and painful in the hepatic region; the tongue is normal; appetite and digestion good, and but slight tendency to constipation.

The liver, manifestly augmented in volume, extends a space of two finger breadths below the false ribs; the spleen also is somewhat enlarged.

The urine is dark-colored and scanty, but presents no traces of albumen.

When she entered the service her morning temperature was normal, 37.6° C., the evening temperature being always somewhat higher, about 38° C.

According to the patient's very lucid statement, there exists no hereditary predisposition to any particular disease. When fifteen years of age she suffered from a violent attack of acute articular rheumatism, affecting all the large joints. The attack lasted two months, and since that period she has frequently suffered from slight rheumatic pains, particularly when fatigued, and these pains were accompanied by palpitation of the heart. At 22 years of age she had a slight attack of jaundice, lasting five weeks, and ten years later a second attack, of much longer duration. It was at this period that she commenced to cough, and the limbs for the first time became swollen. Since then she is much subject to similar symptoms, œdema of the limbs and repeated attacks of bronchitis, which lasted four months, without affecting her general health.

When respiration became too painful and the limbs very much swollen, she entered some hospital service, generally during the month of April,

and after fifty or sixty days' sojourn she was able to leave the hospital, apparently cured, and again take up her daily labor until the same symptoms supervened again.

On the 12th of August these symptoms appeared more formidable than ever before, and were accompanied with considerable hæmoptysis; about two large glassfuls of red, spumous blood were expectorated; this was the first attack of hemorrhage the patient experienced. For the last six months the menstrual flow has been arrested. Such, then, is the clinical history of our patient; it now remains for us to interpret the signs and symptoms observed.

You have recognized, with great facility, that the patient is in a condition of *asystolé*; as to this fact there is no room for doubt.

But is the term *asystolism* or *asystolé* a good one? Is it sufficiently clear, regarded by the light cast on the subject by contemporary research? I do not think so. Beau, who first used this term, said: "We give to these symptoms the name of *asystolé*, comprising under this denomination, also, the insufficiency of the systole, which is the point of departure, and the sole cause of the *asystolic* state."

The following objection may be urged against this theory: if such be the case, how does it happen that *asystolism* is not observed in cases where the heart alone is affected, as, for instance, in the form of myocarditis observed in typhoid conditions. Is it not well known that the heart beat is frequently strong, although the pulse be feeble? And, no matter how feeble the action of this organ, is it not always sufficient to dilate the arteries? How can the multiplied visceral dropsies in *asystolism* be explained, unless we admit a feeble state of the vessels themselves, which have become incapable of properly emptying the encumbered capillaries, because they are, like the heart, in a state of degeneration? These reflections, according to M. Peter, are true, clinically, and physiology, by demonstrating the reciprocal action exercised by the heart on the vessels, shows that the new theory is well founded. I would advise you to read, on this subject, the interesting pages devoted by M. Vulpian, in his work on the vaso-motor system, to the relations existing between the heart and the blood vessels; you will be able then to understand why, since there is physiological reciprocity, there must necessarily exist morbid reciprocity.

At every point of view, the term *cardio-vascular asthenia*, proposed by M. Rigal, is preferable to *asystolé*, and as this author has remarked, the

heart beats may be frequent, unequal and irregular, without cyanosis, dyspnoea, congestions or dropsy; it is the condition to which M. Sée has given the designation *arythmia*.

If the peripheral circulatory apparatus is normal and the heart diseased, the general circulation may remain good; but if the lesion exists in the small vessels, the slightest trouble in the action of the heart will provoke cardio-vascular asthenia and all its consequences. Some patients with very slight cardiac lesions have all the phenomena of *asystolism*; while others with considerable disease of the organ do not suffer from them; because the first are young and the peripheral circulatory system is in good condition and capable of extraordinary resistance; the others, on the contrary, are aged, at least as regards their blood vessels, which are hard, atheromatous, and in a degenerated condition. With such a condition, one may easily understand why, when the heart becomes feeble, from whatever cause, the symptoms of *asystolé* suddenly supervene. M. Peter has, in his clinical lectures, called particular attention to these facts.

Remember, then, that it is necessary, particularly when forming a prognosis, to examine at the same time, and with the greatest care, the condition of the peripheral circulation in conjunction with the state of the heart itself.

Our patient has invariably suffered, at the debut of her *asystolic* attacks, from pain in the hepatic region; on two occasions she has had jaundice. This happens frequently, and when a large number of patients with cardiac disease are interrogated, it will be found that the mode of development of the symptoms due to the cardio-vascular asthenia is always the same for the same patient. You have probably noted that, though there is considerable oedema, no albumen is found in the urine of this patient, and no symptoms of cerebral disturbance are present. The clinical history of the *asystolic* attack may vary, and does vary much in different patients; sometimes there is predominance of the indications toward some particular organ, and in such case the symptomatology proper to the organ most affected dominates. This fact, first brought to notice by M. Grancher, is of interest.

We should now seek for the point of origin of the very marked cardio-vascular asthenia observed in this case. Modern research has brought to light many new causes capable of inducing *asystolism*, and I will briefly enumerate them.

*Asystolism* may be: 1st. Of cardiac or cardio-vascular origin. In such a case, a direct perturbation of the heart itself is the primary cause.

*Asystolism* is a phenomenon which supervenes suddenly, and is generally due to a chronic lesion of the organ.

Much less frequently observed in aortic disease, *asystolé* may come on suddenly, without obvious pre-existing lesions of the heart or vessels, in patients debilitated by the habitual abuse of alcoholic stimulants, or living under unfavorable hygienic conditions; the heart is, in such individuals, overworked.

Under this category may be classed M. Debove's case, where an *asystolic* attack supervened on violent palpitations in a patient with exophthalmic goitre. *Asystolism* is also met with: 2d. In pulmonary diseases. Very rarely observed in acute affections, although cases have been reported of its occurrence in acute pneumonia, by Graves and Grisolle, and in acute phthisis, by M. Parrot, it is frequent in the chronic diseases of these organs, in emphysema, chronic bronchitis and pulmonary sclerosis. It also occurs: 3d. In gastric and hepatic affections; these clinical facts have been recently demonstrated by M. Potain. This teacher has shown that, if the heart reacts on these organs when compensation is broken, reciprocally, the disease of these two organs may induce *asystolé*, by acting on the right heart, probably, through the agency of the great sympathetic and pneumogastric systems.

4th. *Asystolism* is observed in kidney diseases, particularly in interstitial nephritis. In this last, three factors are at work in producing the symptoms; the generalized endarteritis, hyperplasia of the connective tissue of the heart and the gastric derangements so frequent in Bright's disease. 5th. In functional nervous diseases, as in hysteria, I know of no case where *asystolism* occurred, although the attacks of cardiac palpitation are frequently very violent, without, of course, any organic disease of the heart. MM. Peter and Letulle have, however, recently observed, during an attack of acute articular rheumatism, a veritable inflammation of the pneumogastric, the neuritis being characterized by pain on pressure along the side of the sterno-mastoid muscle, in the epigastrium and at the internal portion of the left intercostal space, and accompanied by a marked *asystolic* condition, characterized by general lividity of the cutaneous surface, the lips being cyanosed and bluish, the conjunctiva yellow; the pulse small and very frequent, 140 per minute: intense pulmonary congestion, etc. M. Huchard has observed somewhat similar phenomena in patients suffering from violent attacks of angina pectoris. 6th. In vascular diseases *asystolé* is frequent, as in atheroma of

the arteries, and other forms of vascular degeneration.

Among all the causes of the asystolic condition, some will not come at all into consideration, in explaining the symptoms observed in the case before us.

Nothing in all the symptoms to which I have called your attention points to any renal, gastric or hepatic disease.

There is nothing to prove either that the asystolism is of nervous or vascular origin. The woman is young, she has no atheroma of the peripheric arteries, and no bruit over the aorta. We remain, then, in presence of two possible causes of cardio-vascular asthenia, the heart or the lungs. In this particular case we have the facts furnished by the patient, concerning the existence of anterior attacks of rheumatism, of palpitation, œdema of the lower limbs, etc., all of great importance.

When, in connection with these, we have repeated attacks of asystole, diminution of the præcordial impulse of the heart, transverse augmentation of the cardiac dullness; notwithstanding the absence of valvular murmurs, which have disappeared on account of the feeble energy of the heart's action, you will conclude that the paroxysmal dyspnoea is of cardiac origin, for the pulmonary lesions are not really of sufficient extent, and are manifestly of too recent origin, to be regarded as the cause of the cardio-vascular asthenia.

What are the signs of pulmonary disease present? The signs discovered on percussion and auscultation are sufficient to prove the alteration of the pulmonary parenchyma, but this alteration does not appear to be of the same nature everywhere.

There are evident signs of bronchitis, such as sonorous and sibilant râles and the expectoration; there is also œdematous congestion of the two inferior lobes, characterized by slight dullness on percussion and fine subcrepitant râles, but besides this the apex of the left lung seems to be the seat of a special alteration. You have noticed how marked was the dullness and over how large a space it was evident.

Auscultation over these points demonstrates the existence of rude, blowing respiration, together with exaggerated *sonority* of the voice; in a word, all the signs of pulmonary induration are present.

Of what nature is this induration? Is it a case of ordinary phthisis localized at the apex? I do not think so, for, habitually, tuberculosis is disseminated to the right and left, and in this case

the general symptoms and the evolution of the malady are little in accordance with such a supposition. Can it, then, be a case of primary and unilateral cancer of the lung? This supposition is still less tenable, for in such a case there would exist almost certainly infection of the lymphatic glands, or at least there would be intense pain with sanguinolent sputa, and perhaps symptoms of compression. There are no symptoms of bronchial dilatation, notwithstanding that our patient has been for years subject to attacks of bronchitis. The existence of bronchophony and exaggerated thoracic vibrations, as also the nature of the cough, are against the existence of localized chronic pleurisy.

In fact, chronic pneumonia would alone seem to explain or be in unison with the stethoscopic phenomena. And, in effect, in my opinion, there is simply a fibrous metamorphosis of a part of the superior lobe of the lung.

It is much more difficult to determine whether this fibrous metamorphosis is the result of lobar pneumonia or of broncho-pneumonia. Against this last supposition is the fact that there is no bronchial dilatation; a symptom which, according to Charcot, is characteristic of chronic broncho-pneumonia. It is true that there is nothing in the morbid antecedents of the patient, although she has had frequent attacks of bronchitis, which would permit us to affirm that she has formerly suffered from acute pneumonia. Nevertheless, it is from this order of ideas that the causation of chronic pneumonia must be sought. It is well known, in effect, that among the best demonstrated causes of this malady are those which render the system feeble, such as old age, diseases which induce cachexia, as malarial poisoning, albuminuria, alcoholism and diseases of the heart. As regards this last the authors are not all agreed; some considering that diseases of this organ frequently induce chronic pneumonia, others claiming that there is not sufficient proof of this assertion.

I am of opinion that there exists no very plausible reasons for eliminating organic diseases of the heart from the causation of chronic pneumonia. The case at present before us seems to me conclusive; and last year, in this same amphitheatre, I presented the lungs of a woman, forty-four years of age, asystolic, with disease of the mitral valves. Anteriorly she had had an attack of true acute pneumonia. At the autopsy the inferior and superior lobe of the left lung were found the seat of gray induration; the pulmonary tissue was hard and elastic, entirely impermeable to air, sinking immediately in water.



This part of the lung, with the pleura covering it thickened and fibrous, appeared retracted. Microscopic examination demonstrated that the walls of the alveoli were considerably thickened by fibrous tissue; a few alveoli here and there were filled with a granular substance. There was no trace of bronchial dilatation, nor of cavities of any kind. I have observed two other very similar cases, and I think that in certain cases organic heart disease has a very evident pathogenetic influence.

However that may be, it is certain that in the present case the pulmonary induration of the left apex does not suffice to explain the asystolism. On the other hand, some of the signs indicate recent pulmonary alterations. As I have already said, the asystolism in this case is of cardiac origin and this is the fifteenth attack from which she has suffered.

What is the organic heart disease in her case? It is from the present clinical condition of the patient and from the mode of evolution of the symptoms that a response to this question must be sought. Notwithstanding the absence of murmur, all the symptoms point to mitral disease. The general symptoms, partial and generalized cyanosis and œdema, and the local phenomena, the small, miserable, intermittent pulse, the absence of soufflé, all are proper to mitral affections. I consider, then, that we have here a very grave case of mitral disease. The prognosis is extremely serious, on account of the accentuation of all the phenomena of the asystolic attack, and it is to be feared that this will prove the last.

You have observed the treatment I instituted: I first recommended the most absolute repose, physical and mental. On account of the marked feebleness of the heart, I have given wine, rum, coffee, and easily digested aliments, as the appetite was still good. As heart tonics, I administered  $\frac{1}{10}$  of a grain of digitaline, in granules, per diem with subcutaneous injections of ether as an excitant. To relieve dyspnoea, I applied, several times, dry cups and sinapisms to the chest. Dry frictions over the lower limbs were practiced. I gave diuretic drinks, milk, and on account of the constipation, a few purgative enemata. I have not bled the patient, although general bleeding sometimes affords relief, because she is so weak that I feared to induce syncope.

[This patient died some days later, and the lesions found at the autopsy were as follows:—

The heart was enormous, the left auricle being as large as the fist of an adult. There existed typical mitral insufficiency, with considerable hypertrophy of the left ventricle.

There was œdematous congestion of the inferior lobes of the lungs and chronic inflammation of the mucous membrane of the bronchial tubes. There existed fibroid sclerosis of the superior lobe of the left lung.

No traces of chronic pleurisy, but the pulmonary tissue was hard and resisting, sinking in water. On section the exposed surface is brown and dry, traversed by thick, dark lines.

Histological examination shows the walls of the alveoli much thickened by fibroid tissue. There was no bronchial dilatation, no trace of tubercles. The liver was congested and hard; the spleen also indurated and retracted. The kidneys and other abdominal organs were normal. There was no cerebral lesion.]

I will speak more fully concerning the other patient in a future lecture. It was a case of chronic pleurisy with sclerosis of the lung; the patient presented toward the end of life a condition approaching asystolism with violent delirium, necessitating the application of the strait-waistcoat. At the autopsy we found, as I had predicted, considerable cerebral œdema, induced by the asystolic condition. There existed also numerous adhesions between the parietal and costal layers of the pleura, and almost complete sclerosis of the lower lobe of the right lung; the heart was normal.

## COMMUNICATIONS.

### PROLONGED RETENTION OF THE PLACENTA.

BY GEORGE HAMILTON, M.D.,  
Of Philadelphia.

In a late number of the *MEDICAL AND SURGICAL REPORTER* is recorded a case of "Long Retention of the Placenta," taken from the *Lancet*. From the statement made, the retention lasted about seven or eight months, a circumstance so unusual as not only to surprise, but, possibly, to suggest doubt as to the accuracy of the report. Yet, if an extended examination be made of the earlier or more recent records upon this subject, the cases will no doubt be found to be more numerous than is generally supposed. Retained placenta, similar in duration to that quoted, has, in my practice of half a century, occurred but once.

It may thus appear that this feature of obstetrics can be of only minor practical importance, and so in fact it is, as a general proposition. The number of such cases actually recorded is, probably, small in proportion to what

it would be if practitioners would faithfully furnish to the medical journals, for publication, the cases of this character which may have occurred in their practice. When retention of the placenta does occur, whether in the early or at a later period of pregnancy, and continues for an unusual length of time, it assumes a degree of importance that entitles it to the earnest consideration and cautious judgment of the accoucheur, that he may be enabled to discover, if possible, the proper method of treatment; for it is to be remembered that on this point various and antagonistic opinions are entertained.

The case coming under my observation was that of a lady residing in the country. She was the mother of two children, and when advanced about two and a half months in her third pregnancy, was attacked with severe labor pains, attended with great discharge of blood. On my arrival the hemorrhage and pain had nearly ceased, many large clots had been thrown away without examination, and thus it was uncertain whether the embryo had escaped or not. About the tenth day she left her bed, having neither pain nor discharge of blood, resumed in part her household duties, and so continued during nearly three weeks, when a similar attack ensued, the pains more violent, but the discharge very much less than in the first attack. Upon examination, as in the first instance, nothing of an after-birth could be detected, yet the symptoms strongly indicated its retention, so that a longer confinement to bed was directed, nourishing food given, quinine and ergot were prescribed, the latter drug failing, on this and subsequent trials, to evince its specific action.

These attacks were repeated at indefinite periods until three months had elapsed, when I sought an office consultation with the late Dr. Naudain, of Wilmington, at one time United States Senator from Delaware. In this consultation his son, practicing medicine in the country, also took part. Neither of them had ever met with a similar case, and both concurred in opinion that if so small a placenta had not passed off in the first attack, it had gradually come away in shreds, by dissolution, or that it had been absorbed; so that the real cause of these repeated prolonged attacks might, with more reason, be attributed to a tumor, or to some special disease of the uterus. No material change in the treatment was proposed by them, nor was any made. Another month had passed away without essential change of condition, when a messenger was dispatched to West Chester, a distance of twelve miles, to summon Dr. Thomas, preëminent

in experience and capacity, to the bedside of the patient. On being informed that four months had elapsed since the first attack, he expressed surprise, saying that while he had met with a number of cases of abortion in which the placenta was retained, none of them exceeded four or five weeks, and were finally passed without serious injury to the patients, and without active interference. After careful examination Dr. Thomas said he found nothing to explain the real condition of the patient, and that while it seemed improbable that any considerable portion of the placenta could be so long retained, he did not regard it as impossible, and in this view I concurred, satisfied, as I was, that the woman was advanced about two and a half months in pregnancy, that the first attack was precisely what we are accustomed to see in abortion, and that each subsequent attack was radically but a repetition of the first. The only proposition by the Doctor was to give rather larger doses of ergot and quinine; and before leaving he expressed the opinion that the case would terminate favorably, and the issue justified this prognosis, but not until two months additional had passed away (with the attacks as usual), making six altogether. On the first of the last three visits made to the patient, the nurse, with smiling face, met me at the door, and called out that she had good news for me. She then said that during the previous night the lady had one of her usual attacks, lasting not so long as usual, and leaving her very abruptly, entirely free from pain. On withdrawing the cloths upon which the discharges had been received, the afterbirth, to the infinite joy of patient and nurse, was found. It had not come away in shreds, it had not passed off in decomposition, it had not withered away, nor had it been absorbed, but was nearly as large as the average placenta of a two and a half months abortion; and this was fully explained by observing the side of the placenta attached to the uterus, the numerous vessels severed at the moment of expulsion, and through which the vitality, consistence and bulk of the placenta had been maintained.

In this connection another case of placental retention, of different and more exceptional character, may deserve notice. A lady some years ago desired my attendance for the third time, in confinement. The patient told me that she had yet to go from three to four weeks to complete the full term. After a short and easy labor, she gave birth to a still-born female. The child was at least as large as the average at full period, the head somewhat deformed, the features

of the face idiotic in expression. Waiting a moderate length of time, and no pain occurring, gentle traction upon the cord had no sooner begun than, to my great surprise, it came away, although it appeared to be of average strength and thickness. Ergot was then resorted to, in full doses, but failed to produce pain, nor was there any normal pain of the least importance. On introducing my hand, for the purpose of delivery, it passed readily along between the placenta and the uterus, until it approached the fundus, upon the left side, where the tissue of the placenta became so hard and tough, and the adhesion to the uterus so firm, that prolonged effort at separation was ineffectual. On withdrawing my hand, about half of the placenta was grasped and brought away without any difficulty, for the lower portion of the after-birth was simply a pultaceous (incoherent) mass, void of adhesion to the uterus, but without the odor or appearance of putrescence. The patient was informed that a portion of the placenta still remained, yet she was perfectly calm, although alone, her nurse not having arrived, and expressed the hope that another effort might be successful. This was accordingly made, and while more force was employed than before, and far more than I had ever before or since employed, no impression whatever was made upon the tough and hardened mass occupying the left side of the fundus. Before withdrawing the hand, as much as could be separated from the lower portion of the firmly adherent placenta was brought away, leaving from one-fourth to one-third attached at the point designated.

Fortunately there was no disposition to hemorrhage, nor is this strange, when we call to mind the actual condition of the lower part of the placenta, without adherence to the uterus, and the singular condition of the remaining portion, both in reference to composition and adhesion.

With the cheerful consent of the patient, who placed implicit confidence in my judgment and sense of duty, I left her, and called upon Dr. Beesley for the purpose of consultation. In a large practice he had never met with such a case, but called to mind several instances of retained placenta lasting from one to five weeks, all of which were abortions, of from six to twelve weeks. All these did well, and he strongly approved my purpose to avoid further effort at separation. On my way back to the patient, the late Professor, Dr. Joseph Carson (then Accoucheur to the Obstetric Department of the Pennsylvania Hospital) was called upon, who, when informed of the nature of the case, and the two forcible attempts

unsuccessfully made to remove the remaining portion of the placenta, said that the situation of the woman was sufficiently critical, without rendering it more so by substituting for the gentle and most probably successful efforts of nature an irrational and reckless amount of brute force. Before arriving at the residence of my patient a third gentleman was spoken to upon this exceptional case, who, although not an adept in obstetrics, was eminent for his mechanical genius, skillful in contriving surgical appliances, and decidedly remarkable for his ardent, impetuous temperament. The history of the situation of the woman seemed to him alarming, and, after enumerating the sources of danger, hemorrhage, inflammation, pyæmia, putrescence, blood poison, or the formation of a tumor, he ended by saying that he saw no hope for the patient but in the removal, if possible, of the adherent portions of the placenta, without regard to the amount of force required. On reaching the home of the patient, from whom I had been absent an hour and a half, I found her comfortable, suffering no pain of any moment, free from hemorrhage, and when informed of the result of the consultations with Drs. Beesley and Carson, she fully acquiesced in our decision. Before leaving I again introduced my hand, and found no change in the situation. After the fourth day, daily visits only were required, and upon the expiration of the second week the visits were discontinued. As may readily be conceived, the lady, as well as myself, was anxious to know what might result, sooner or later, from the retention of so large and firm a portion of the placenta. It was for this purpose enjoined upon her, from the first day, to have every discharge, whether from the bowels or bladder, closely examined, to ascertain its precise character, and that, so soon as the nurse left, she herself would continue these examinations for at least three months. That this injunction was sedulously obeyed there is no reason to doubt, and when the time had expired, she informed me that she had neither felt nor observed anything different from what had occurred after the two previous confinements. It seems probable that absorption was at work in this case, but whether in this or some other way, nature dealt so gently and effectually, in preparing for another conception, that in less than two years she was again quickly delivered, at full term, of a living child, followed as before by favorable recovery.

As stated above, cases of this kind are so seldom met with that, in a practical point of view, they may, perhaps, be regarded as of slight

importance; yet, if we bear in mind the indisposition of a large proportion of practitioners to report cases, even if specially abnormal, the inference is legitimate that the number is not inconsiderable. Few as they may be, they are of value, especially at the present time. From year to year there seems to be an increasing distrust in the restorative power of nature, and this distrust in a *vis medicatrix naturæ*, is especially manifested in reference to the ability of woman to accomplish, without active interference, that work to which she is specially destined. Influenced by this idea, many physicians are ready to declare impossible that which a few cases of the character just cited prove to the contrary. That placental retention, either in the earlier or later stage of pregnancy, may be so complicated with other adverse conditions as to imperatively demand active and prompt interference, is manifest; while on the other hand it is to be feared that, in the absence of such conditions, the mere apprehension of impending danger in one or another form above named may have suggested and led to the employment of measures, manual or instrumental, that might well have been delayed until their necessity had been more clearly established. In conclusion, we would commend to the serious consideration of those whose faith is weak in the conservative and restorative power of nature, the noble, eloquent, and reverential apothegm of him who has worthily been called the Father of modern surgery, Ambrose Paré, "Je les pause, Dieu les guérit."

#### SMALLPOX AND VACCINATION.

BY JOHN T. HUDDLISON, M.D.,

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The Philadelphia *Inquirer* of February 8d contains an editorial notice to the following effect: "Hon. P. A. Taylor, member of Parliament for Leicester, flatly denied the assertion of Dr. W. B. Carpenter, that vaccination is a protection against smallpox. Mr. Taylor says the scourge comes in an epidemic form, at different periods, and when the contagion is in the air the mortality is only reduced by superior hygienic arrangements. He shows by official reports that the plague has recently been as general and as deadly in London and other cities where vaccination is compulsory or universal, as it was before the alleged preventive was used, etc., etc. He makes a strong appeal to Parliament to repeal the Compulsory Vaccination Act, which he believes gives no protection against smallpox, but

introduces *vaccine tuberculosis* and other terrible diseases into the human system." He says, "The only way to check the scourge is by '*isolation*,' and cites the condition of Malta, 'where, some years ago, the smallpox appeared; the garrison was *isolated* (the italics are mine) and all the troops revaccinated, but before the year closed over one hundred soldiers were attacked by smallpox and a large number died, even under the best treatment." He neglects to inform us whether or not these deaths occurred among the new troops sent to refill the previously decimated ranks. From his own report, his proposed remedy is utterly worthless, and he might just as well let us retain the one that most of us have confidence in.

I have been engaged in the practice of medicine for considerably more than half a century, and, for a private practitioner, have had pretty extensive experience in the treatment of smallpox and in vaccination, and in noticing the progress of the disease from point to point, and have become convinced that smallpox is never epidemic in the strict meaning of the word, but that the contagion is conveyed in emigrant ships, railroad cars, mail bags, infected paper stock, clothing and other fomites, and, but for very short distances, by the atmosphere, as, in fact, its progress across the American continent is commonly in the face of the prevailing winds.

The origin of smallpox is not known; but it is said to have existed in China and Hindostan more than 1000 years before the birth of Christ, and made its way into Arabia in the year of the birth of Mahomet, 569. Pursuing the track of armies, we find it raging in Egypt in 640, and subsequently, following the victories of the Saracens, in the eighth century, through Italy, Spain and France. By the Saracens the disease was communicated to the Crusaders, "who caused its spread throughout Europe" (*vide* Morse's "History of Smallpox"). There was no smallpox in the New World before its discovery by Columbus, in 1492. It was introduced into St. Domingo in 1517. Three years later, in one of the Spanish expeditions from Cuba to Mexico, a negro, covered with the pustules of smallpox, was landed on the Mexican coast. From him the disease spread, with such desolation that, within a very short time, according to Robertson, three millions and a half of people were destroyed in that kingdom alone (*see* "Wilson on Skin Diseases"). In all this, nothing is or can be ascribed to epidemic influence.

I most emphatically deny that there is any such disease as *vaccine tuberculosis*, or that either



smallpox or vaccination carry any other disease into the human system. They are essentially skin diseases, whose course is determined in a limited number of days, whereas tuberculosis is known to affect every other tissue in the body, and so far as known, is the result of a hereditary diathesis, is not contagious, cannot be communicated by inoculation, and is a lifelong disease. Vaccination, therefore, never introduces other "terrible diseases into the system," as the Hon. Mr. Taylor believes, but may, like scarlatina, measles, or any other cause of reduction of the vital force for a time, afford opportunity for the development of certain other diseases, as eczema and nettle rash, that have been lying dormant in the system and are ready to break out on the slightest provocation; but these instances are comparatively rare, and are of small moment when the almost certain exemption from the infinitely greater evil of smallpox is to be considered.

In regard to *compulsory vaccination*, I do not know where Mr. Taylor gets his figures; but according to the statistics of Hoffmann, "before vaccination was made compulsory the death rate from smallpox in England and Wales was one in 25 nearly, while in Prussia (where it was compulsory), of an average of a million of deaths, only one in 122 was from smallpox;" also that "the soldiers and seamen of England, being better protected, were almost exempt, being only one in 2000 in the army, and even less in the navy."

Of the efficacy of vaccination as a prophylactic I entertain no doubt. I was vaccinated in 1802, with virus obtained from the late Dr. J. Redmond Coxe. I attended the medical lectures in the University of Pennsylvania, in the years 1822-3-4, when smallpox and varioloid prevailed extensively. The students in the class, nearly 500 in number, were, for the most part, revaccinated. There were a few cases of varioloid in the class. A student who had been previously inoculated took smallpox and died; the only fatal case. Wishing to test the durability of the remedy I refused to be revaccinated; I attended the clinics at the Pennsylvania Hospital and the Almshouse, which were teeming with smallpox patients, and have since treated the disease in its worst forms, and have as yet escaped infection. On one occasion I attended in a family where out of six children only one escaped, and he was the only one who had been vaccinated. I could multiply instances.

Medicine not being considered an exact science, although by aid of the microscope and

vivisection it promises to become so in the near future, it has not as yet satisfactorily explained why vaccination prevents smallpox any more than it is known why the passage of an electric current will reverse the poles of a magnetic needle. For the present the facts are sufficient for all practical purposes. Many persons entertaining views pretty similar to those of the honorable Mr. Taylor, in order to escape the danger of contracting sundry bodily infirmities through the use of humanized virus, resort to *bovine lymph*, regardless of the dangers of rinderpest, murrain, or the acquiring of a *grammivorous* appetite.

If smallpox is ever stamped out, it will be through compulsory vaccination aided by the strictest quarantine; but, of course, it must be universal.

## HOSPITAL REPORTS.

### UNIVERSITY HOSPITAL.

A Clinical Lecture, delivered

BY WILLIAM PEPPER, M.D.,

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Reported by WM. H. MORRISON, M.D.

#### The Diagnosis of Simple Catarrhal Fever—Typhoid Fever.

GENTLEMEN:—I have to-day brought this case before you, and later I propose to show you the Frenchman with typhoid fever, who has presented some very striking changes in his condition since you last saw him.

This girl illustrates, in an excellent way, some of the points of differential diagnosis in regard to the continued fevers, as well as some very interesting and practical points in pathology. I shall briefly give you her history.

She is an Irish girl, 20 years old. Until the 9th of this month she was well. At that time she was suddenly taken sick, with violent headache, pain in the back, fever, delirium, loss of appetite and tenderness over the stomach, but no diarrhoea at that time. She remained in about the same condition until the fifth day of the attack, when she was admitted to the hospital. On admission, her temperature was 102.5°; pulse 116; and respiration 24 in the minute; the pain in the head and back continued; she wandered at times; the tongue was red at the edges; pointed and coated posteriorly with a yellowish-white fur; the bowels were loose (she may have taken purgative medicine before she came here); they were opened twice in twenty-four hours; the stools were light in color; the abdomen was still tender. The next day her condition was about the same. On the succeeding day the bowels had become quiet. She has remained in somewhat the same condition, except that there has been a gradual improvement in her

up to the present time, the morning of the 17th, the eighth day of the attack.

You will at once see a resemblance in this case, in some of its aspects, to a case of typhoid fever, but you will, I have no doubt, at once see marked points of distinction. You will not rarely come across cases where it is difficult to distinguish clearly whether you have a case of simple continued or catarrhal fever, or one of the specific fevers, particularly typhoid. I mean by simple continued fever, a febrile affection which is directly associated with a catarrhal inflammation of the mucous lining, chiefly of the stomach and bowels. We may, of course, have catarrh of the respiratory tract, and with it fever; but these cases are characterized by such marked physical signs, that they never give rise to any confusion; but the cases in which there is catarrhal inflammation of the mucous lining of the stomach and bowels, with febrile action, do often resemble typhoid fever of a mild type, and are frequently taken for cases of that disease.

Let us then consider in what particular they resemble each other, and in what particular they differ.

We find that, as a rule, catarrhal fever has a shorter duration, anywhere from nine to fifteen days, or even in some cases to twenty days. Secondly, the fever is, as a rule, not so high as in typhoid fever. There is the same fluctuation between the morning and the evening temperature, but as a rule, the evening elevation is not so high as in typhoid; nor does the temperature show that peculiar tendency to vary in successive weeks of the disease. In typhoid fever we have a lesion which occurs in successive crops; the follicles enlarge, ulcerate, and then slough; but they do not all do this at the same time. First one group enlarges, reaches maturity, ulcerates, and sloughs, then another group passes through the same change. We have thus a peculiar course of the temperature in each week of typhoid fever. We find, in the same way, that the other symptoms, particularly the eruption, follow this same fluctuating course.

Again, although in simple continued fever there is a continued fever with marked daily variations, the disease is wanting in some of the characteristic symptoms of typhoid fever. There may be in catarrhal fever moderate distention of the abdomen; there is usually a tendency to looseness of the bowels; the stools may be of a yellow color, resembling closely the stools of typhoid fever, so much so that it is often impossible to distinguish between the two; but the degree of distention of the abdomen is rarely as great as in typhoid. The coats of the bowel are not so much involved; there is not the same degree of paralysis of the muscular coat; there is, therefore, not so much distention of the bowel.

In catarrhal fever the diarrhoea is rarely so severe and uncontrollable as in typhoid. There is scarcely ever any hemorrhage, and if any, it is very trifling.

Again, there is an absence of any characteristic eruption in this disease. In typhoid fever, about the seventh day there appear, on the abdomen for the most part, the peculiar, little, oval, rose-colored spots. In catarrhal fever they do not appear.

Bleeding of the nose, which occurs frequently in typhoid fever, rarely occurs in catarrhal fever. This is a much less characteristic symptom of typhoid fever than some that I have mentioned and some that I shall mention.

Bronchial irritation we may of course have, because the catarrhal trouble which affects the stomach and bowels may also affect the respiratory mucous membrane. The presence, therefore, of a loose cough, with evidence of bronchial irritation, will not, in itself, enable us to distinguish, with any degree of certainty, between the two diseases.

The nervous symptoms in simple catarrhal fever are rarely grave. In an average case of typhoid fever the mind is dull, there is marked hebetude; questions are answered slowly; as the disease goes on there is apt to be delirium. As the case goes on the patient may pass into a state of marked delirium, or, on the other hand, into a state of deep stupor. These symptoms are common in marked cases of typhoid fever. In catarrhal fever the patient may be a little dull, reluctant to talk, and will lie quietly, as long as he is left alone; or there may be a little tendency to wander; but there is rarely the marked nervous symptoms that I have described as occurring in typhoid. In very nervous subjects, in those whose nervous system is easily thrown off its balance, catarrhal fever may cause marked delirium.

You see, therefore, that there are between the two diseases points of distinction and points of resemblance. The differences being to a considerable extent merely those of degree; and were this all you can readily see how difficult it would be to distinguish between a marked catarrhal fever and a mild typhoid fever.

In addition to these differences of degree, there are actual and specific differences, namely, the duration of the disease, the peculiar fluctuations of the fever and the absence of special eruption. Upon these latter points we often have to base our diagnosis, and not rarely you will have to hold your judgment in abeyance for a certain length of time before making the diagnosis.

There are actual differences in the cause and in the mode of onset. Typhoid fever we recognize as depending upon the introduction into the system of some form of poison, from some source, by some route, probably taken in by drinking water, or inhaled into the lungs, and which, entering the system, sets on foot changes in the blood, especially lesions in the glands of the intestine, going on to ulceration, and peculiar changes in the spleen. The development of typhoid fever is slow. The poison gains access to the system; there is a period of incubation, and then the gradual development of symptoms.

Catarrhal fever has quite a different beginning. In the majority of cases the symptoms develop rapidly. In this case the patient speaks of having been well until the 9th of the month. She was then suddenly taken sick, with headache, pain in the back, fever and delirium.

If we knew, or could study the circumstances under which the disease arose, we might receive some light as to the nature of the case. It we found that this woman had been exposed to bad hygienic conditions, if the air she breathed had

been contaminated by the emanations from drains or sewers, if she had been subject to depressing causes, which would render her more susceptible to the typhoid poison, we might suspect that she was suffering from typhoid fever. If, on the other hand, we had found this trouble coming on after exposure to changes of temperature, or draughts, or getting the body chilled, or after some acute indigestion, with at the same time exposure, we would have reason to think that there was no septic poisoning, but that it was an ordinary catarrhal attack.

In this case, everything, the onset and the character of the symptoms, appears to indicate that this is a case of simple catarrhal fever.

This is the ninth day of the attack, and just the time, if it were typhoid fever, for the eruption to appear; the other symptoms should be developing, and the fever rising; but instead of this, we find that the pulse is 84, and the temperature 99°. In typhoid fever it is rare to have the temperature go down to 99° until the morbid process has run its course. When the lesions have terminated, the ulcers cleaned, and the irritation subsided, the fever will fall, and not till then.

We find to-day that the tongue is cleaning. It is moist. It is a little red and the papillae are enlarged. There is a little white coat on the back. It still evidences distinct irritation of the gastrointestinal mucous membrane; a tongue of that kind on the ninth day of typhoid fever would be unusually favorable. There has been no disposition to diarrhoea for several days. She has no appetite. I now examine the abdomen, to determine the presence or absence of pain. Even when you are not sure that the case is typhoid fever, I would beg of you not to knead and press the abdomen too hard. Do not poke the tips of your fingers into the right iliac fossa, to try to develop pain or gurgling. You are poking precious and tender tissues, and you had better do it very gently. It does you no good to develop pain, and it may do your patient a vast deal of harm. It does you very little, if any good, to develop gurgling. It simply indicates that there is air and liquid in the bowel, and this condition may occur in diseases other than typhoid fever. There seems to be a little hyperæsthesia over the bladder. There is no distention of the abdomen. There is not a trace of eruption. There are a few little brown freckles. There are a few sudamina, *i. e.*, little drops of sweat caught under the epidermis. They have no special value whatever.

It would seem, therefore, that the patient has simple continued fever, of a catarrhal origin, without special typhoid poison associated.

Sometimes you will find that these cases will run on for twenty days. In such cases you will readily understand how difficult it would be to state positively that there is no typhoid fever present. You should be very cautious how you make such a statement, for if you say there is no typhoid fever present, it will not be deemed necessary to adopt the same careful treatment as in that disease, but if it should be typhoid fever, your want of care may cause the death of the patient, from hemorrhage or perforation. If you err, let it be on the side of safety. If you are not perfectly sure that it is a case of catarrhal irritation, with

continued fever, call it mild typhoid, treat it as such, and insist upon the patient remaining in bed until the period that typhoid fever requires has elapsed. Keep the patient in bed for thirty days, so as to diminish the possibility of the rupture of a latent ulcer, causing the patient's death.

As to the pathology. It is very interesting to consider how long this fever can be kept up without, as far as we know, any special poison in the blood. It has become too much the custom, when a patient has fever which is not readily accounted for, to suspect blood poisoning. Blood poisoning is one of the fashionable topics of the present day. It has been taken up, not only by the profession, to apply to many cases of obscure disease (for if you say a patient has blood poisoning everybody is satisfied), but it has also been taken up by sanitary engineers, plumbers, and the people at large. Constantly, when attending a case where the febrile action is at all obstinate, you will be asked, "Doctor, is there not danger of blood poisoning?" Local lesions have caused fever from the beginning of the world, and will do so as long as the body retains its present construction. Before you bring into the explanation of a case such a mysterious agent as blood poisoning, be sure that there is no local lesion present sufficient to explain all the symptoms. Do not neglect to make a minute physical examination of every organ.

As we go on in our clinical studies, I shall be obliged to return time and again to this topic, that local diseases excite general disturbance, that they implicate the whole system, and that, if neglected, they may give rise to the gravest general disease.

It is excessively interesting to see how a simple local lesion of a mucous membrane, without, as far as we know, any septic element, may keep up a continued fever of this character for so many days. "Yes," you may say, "but do not the secretions undergo change and become poisonous, and is not some septic matter absorbed from the bowel which has an influence on this fever?" I have no doubt but that there may be, in certain cases, such an occurrence. I am inclined to think that a patient who has catarrhal fever, whose intestines are filled with matters ready to undergo fermentation and putrefaction on the slightest change, may have admitted to the system a minute amount of the typhoid germ—the typhoid ferment—possibly so small an amount that, if the system were in perfect health, it would be cast off and cause no trouble, but finding a suitable nidus, it develops and passes into the system, giving rise to a typical attack of typhoid fever. The typhoid fever poison must be very widely distributed. I fancy that through the system of nearly every one of us some of it has passed at some time; but it will undoubtedly act very differently and will produce very different results, according to the state of the bowel and the state of the system. An amount which would be eliminated readily when the system was in perfect health, will, if it finds the bowels containing matter prone to decomposition, and forming a suitable pabulum for it, go on developing and give rise to genuine typhoid fever. I

have frequently seen cases apparently of simple catarrhal fever occurring under unfavorable circumstances run into typhoid fever. Though I do not intend to assert that simple catarrhal fever can turn into typhoid fever from the absorption of ordinary putrefactive material from the bowel. As far as we know, the special typhoid poison must be admitted to the system and gain entrance to the blood.

But in this case, and in many of these cases, we have no right to suspect the least absorption, either from within or without. The fever is the result of irritation of the epithelial layers of the mucous membrane and of the terminal nerve fibres, and through these fibres, of the heat producing centres of the higher part of the nervous system. It is the same sort of fever that we have produced by local lesions everywhere.

If this is the case, you will see at once how enormously important is the treatment of these sorts of cases; and not only that, but you will begin to comprehend how very important, even in cases where there is blood poisoning, and also a local lesion, is the treatment of that local lesion. In typhoid fever, where there is a local lesion as well as blood poisoning, it is very important to address remedies to the cure of that lesion. Here we have a much simpler matter, for if we remove the irritation of the bowel the symptoms will at once improve.

Let me at the commencement of our studies speak against the use of purgatives at the beginning of febrile affections. What indication is there for any purgative dose at all? The chances are that the intestine is in a state of acute congestion, and you give a dose which if given to a man in perfect health would set up a degree of irritation that would make him miserable and sick for several days. The reply is, "I gave it to remove the morbid secretions, to carry off the effete matters." Very well; if you were dealing with a rubber hose, and could be certain that when you removed the obstruction it would remain out, there would be some reason in the treatment; but how do you know that while you remove the morbid secretions from one end of the bowel they will not collect at the other? The purgative you give may only increase the gastritis and duodenitis, and the morbid secretions will be thrown out more abundantly.

Be sure, therefore, that you have such an obstruction—such an accumulation as absolutely requires removal—and then graduate the dose to the condition of the stomach and to the irritation of the small intestine. I should treat such a patient expectantly for a short time. Then if I were satisfied, from the moderate distention of the bowel and the passage of one or two stools of an unhealthy character, that the inflammation of the mucous membrane was of an unhealthy grade, I should use the mildest sort of a purgative. Nothing that would nauseate should be given. What we desire is a substance that is at the same time a laxative and a sedative. Calomel in small quantities combines both of these qualities. I often use the following formula:—

R. Calomel,	gr. ij
Subnitrate of bismuth,	3 ss ad 3 j
or	
Bicarbonate of soda,	3 ss ad 3 j

This I divide into twelve powders, and give one every two hours until the bowels are moved or all the powders have been taken. If there is much irritation of the stomach I use bismuth, but if the stomach is quiet, I use soda. If you produce one comfortable stool, you have done enough, and there is no longer any justification or necessity for purgatives. If, after using a dozen of these powders no stool is produced I should stop them and would use the ordinary liquid citrate of magnesia in very small doses. To an adult I should give f3 ij every two hours until a stool was produced; or, I should give one-third or one half of a seidlitz powder.

In all of this class of cases, you will find that laxatives act with unusual force. After this woman came in she had two or three loose stools, but no sooner was she put upon a soothing treatment and simple diet, than the bowels became quiet and remained quiet, and on the ninth day the fever was gone.

You have a patient who is about to have typhoid fever, and you give him an ounce of oil, or a couple of compound rhubarb or compound cathartic pills, and that man has eight or ten loose stools, and you so far aggravate the disease of the bowel, that you may have converted what would have been a mild case into a severe one.

You have a patient with catarrhal irritation, and you give him strong purgative doses; you fix that inflammation in his bowels for fourteen or fifteen days—five or six days longer than it need have been, because you aggravate the lesion in its very inception. If you had a patient with a simple fracture, and the indication was to secure primary union, and you took hold of the bones and produced active crepitus for twenty minutes, the treatment would be about as philosophical as it is to give active purgatives in these catarrhal conditions. I earnestly hope, as one result of our studies, that we shall come to a definite conclusion not to use purgatives in acute diseases, unless they are absolutely called for, and that when they are necessary, we shall give some mild, sedative laxative, in minute doses, oft repeated.

There can be no question as to the serious harm that has resulted from the excessive use of purgatives in acute disease. The success of homœopathy has resulted largely from this practice on the part of physicians, and there is nothing which continues to do more harm than an adherence to it.

#### Relapse in Typhoid Fever.

I want to again call your attention to this typhoid fever case. He has had a relapse. His temperature when you saw him last, the 13th, was only 100.4°; his pulse rate was 88 and respirations 20. On the morning of the 14th he was just as well, but in the afternoon his pulse began to go up; the temperature jumped at once to 104°; the morning of the 15th it was 102°, in the evening 104°; morning of the 16th 102°; last night 104°; and this morning it is again 102°. After there had been a great reduction of the morbid process, there is a very abrupt and severe renewal of it. Of course, this is associated with a renewal of one of two things; either more poison



has entered his blood, or else there is an outbreak of some local irritation.

What symptoms has he presented? He became delirious, but his delirium was of a very mild type until last night, when, I am sorry to say, he quietly got out of bed and walked some distance, but he does not seem to have hurt himself. His tongue is moist and slightly coated. Examining his chest, I find the heart sounds normal. He has not had much cough. The chest is resonant throughout. There are a few bronchial râles. There is no reason to suspect any definite pulmonary trouble. There is merely congestion and bronchial irritation. He has had two small attacks of epistaxis. The bowels are quiet. We must, therefore, attribute this local outbreak and sudden rise in temperature to the beginning of disease in another group of follicles and glands of the bowel. I have no doubt that the epistaxis was due to enlargement and ulceration of follicles in the nose.

This man is in for another little siege. A fresh group of glands have become inflamed, and this must run its course. We have not nearly reached the point where we can relax the rigidity of our treatment in this case. More than this, knowing that the separation of the sloughs from a former group of ulcers was followed by a hemorrhage of almost a pint, we have great reason to fear another sudden burst of hemorrhage, and this, in his present weak condition, would, of course, be more serious.

Under these circumstances, I think it proper to add stimulus in moderate amount to the treatment of this man. I want to call attention to the gratifying fact, that while the temperature has gone up so high the pulse rate has remained

excellent; it has not reached 96 per minute since the evening of the 14th. I told you when we had this man before us last, that he had a markedly dicrotic pulse; to-day it is less so. I shall, therefore, give stimulus in only small amounts. We shall give him  $\text{f}\frac{3}{4}$  iij of sherry wine every twenty-four hours, in the form of wine whey, made into about twelve or fifteen ounces of whey. We shall give him a wineglassful, alternately with his milk. The pills of nitrate of silver and opium will be continued, but I shall increase the frequency of administration, hoping to favorably influence the diseased glands.

His temperature has now reached a point where it may be questionable whether it is not right that something more positive should be done for its reduction. It has reached a point where a good many authors would say that the patient should be put in a cold bath, and kept there until the temperature goes down. I never for one moment assent to any such practice. I should advise sponging with tepid water at a temperature of  $72^{\circ}$  and containing a little vinegar and carbolic acid, or a little alcohol and carbolic acid. That will reduce the temperature. I do not care about bringing it down too rapidly. It is not associated with grave nervous and cardiac symptoms. It is due, I think, to the local trouble. If his temperature remained persistently at  $104^{\circ}$ , I should certainly adopt stronger measures for its reduction; but as long as there is this marked fall of two degrees in the temperature every day, I do not think it necessary to resort to a treatment so disturbing as cold water bathing.

I hope that we may be able to avert the great danger here, which is hemorrhage.

## EDITORIAL DEPARTMENT.

### PERISCOPE.

#### The Victims of the Ring Theatre, in Vienna.

The *Allgemeine Medicinische Central-Zeitung* publishes Professor Hoffmann's report on the methods adopted for the identification of the victims of this great fire. Some of his observations will no doubt be of interest to our readers. In this report he says: Over two hundred and fifty bodies were examined, and a great many among them identified. In many cases, owing to almost complete carbonization, sex could only be ascertained by internal examination; the presence or absence of the uterus and ovaries being our only guidance. Age could likewise only be approximated, yet was of importance in establishing identity. Simple inspection often revealed strange transformations: age bore the semblance of youth, and reciprocally. In such cases we had to rely on the indications furnished by the humerus, with regard to complete union between the diaphysis and epiphysis. As you are aware, this only becomes perfect after the

twenty-fourth year. In like manner, the ossification of the ribs and larynx served as indices; for you remember, with this last it commences at from thirty to thirty-five, and is complete by about the fortieth year. The condition of the ovaries supplied valuable information. In girls and young women they were quite smooth, but in older subjects they had that well-known uneven appearance which they assume after numerous ovulations.

The hair and beard on a great many bodies had become of a uniform black color, and only by careful cleansing were they restored to their natural hue.

The color of the eyes was not easily detected, the cornea having a milky and cooked-like appearance. In some cases an opalescence of the iris led us to believe the eyes were blue.

The teeth were calcined, and so brittle that they crumbled under the least touch. They looked as if carious, and it was often very difficult to judge of age from the amount of wear they presented. We found great quantities of artificial teeth.

When the hands were under inspection the condition of the epidermis and finger nails supplied indications. In proof of this, let me tell you an episode. An aged couple and their son were in search of a young woman, the wife and daughter. As an indication, they said her finger nails were red, from nursing. A body was found with breasts and nails answering this description, but around the neck was an "amulet" and cross, and the sorrowing family were Jews. Later, however, another body was discovered, and fully identified by them.

Under the head of "particular marks," we noticed a cicatrix from coxalgia, and a cyst at the root of a right index finger. Of course, we found many hernias and hernial bandages.

In all, we ascertained six cases of pregnancy, of which one was in the sixth month, two in the second, and two in the third. In one of these last, all that remained was the neck, the uterus and ovaries having been carbonized. The breasts contained some colostrum. This body was identified.

Surfaces still covered by portions of clothing were found well preserved, even upon bodies otherwise greatly carbonized.

As may well be imagined, we met with burns of every degree, but generally speaking, only very few bodies bore the appearance of having been burned while alive; external erythema and phlyctenae being quite rare. It is probable that the majority of the victims in this terrible catastrophe were first smothered by smoke, and only burned while in asphyxia, in agony, or after death.

In some cases skulls had been carbonized and split open by the heat, exposing the calcined brains; and many abdomens were found gaping open, their shriveled contents having remained undisturbed.

#### Remarkable Case of Periodical Feeling of the Cuticle.

A. Chevallier Preston, M.R.C.S., reports the following singular case in the *Lancet*:—

M. J., aged sixty-seven, a fairly nourished woman, of fair complexion, came under my care in July last. The complaint from which she was then suffering was of old standing; but she stated that she had, with this exception, enjoyed good health from childhood. The only serious illness had been smallpox at the age of two years, and she has a large bronchocoele, which developed at the age of puberty. Subjoined is the history she gave me of her present illness, which is, according to her statement, identical with what she has suffered at intervals since childhood. At intervals of a month or six weeks the following occurrences manifest themselves: After a day or two of slight feeling of malaise, the skin of every part of the body comes away in "casts," and the cuticle, which separates from the extremities, does so in one entire and sometimes unbroken piece, resembling a "glove" or "stocking." The new skin beneath has the appearance of ordinary skin after desquamation, and "lasts her," to use her own expression, for several weeks, when it begins to get irritable and in-

flamed. She has lately been going through one of these "changes," and I have had the opportunity of watching her daily. The first time I saw her, a week before the final "casting off," she was feeling unwell, and told me she was expecting a change of skin, and begged me to give her no medicine, as she had found that certain medicines that were prescribed for her at this stage made the skin fall off more thickly, and caused her pain, by leaving only a thin covering all over the body; at least, this was her experience. She was then suffering from slight rheumatic pains in her left elbow, for which I prescribed an anodyne liniment, which relieved her; but she was not able to continue it, as the peeling commenced where the liniment was applied, and the new skin was too tender to bear it. She was kept in bed, being cold weather, and in three days the desquamation became general, the skin of her nose, ears and hands coming off as complete casts. The desquamated skin is of the thickness of the ordinary cuticle, and in places it is as tough as the lining of a hen's egg. I have preserved the covering of the hands and feet in spirit. Now that the skin has come off she expresses herself as "quite well" again, and is able to get about, feeling far more comfortable in the new skin than in the old one. I questioned her closely as to her previous history, and could gather nothing from it to throw any light on the cause of this extraordinary phenomenon. She has had a large family, and has healthy children; none of them having any appearance of her idiosyncrasy. The state of her menstrual functions was always good up to the change of life, seventeen years ago; and she did not associate this occurrence with the menstrual flow at any time, unless by accident. She states that she first remembers an attack of this kind at the age of seven years, and she was afterwards told by a medical man that it was from "catching cold after the smallpox." The phenomena of this disease are so unfamiliar to me, that I shall welcome any hints as to diagnosis, etiology and treatment of the case.

#### Inoculation for Pannus.

In the *American Practitioner*, Dr. W. Cheatham, after describing the different varieties, and discussing the etiology of pannus, says, "Many remedies have been advised. Argenti nit., cupri sulph., acid tannic., and poultices, besides operative procedures, are a few only of the corrective measures recommended. These may give some relief in the milder cases, but where you have a true pannus crassus to deal with, I do not believe that anything will yield the result that inoculation with blennorrhoeal matter will." He then relates the following case:—

"A farmer, aged forty, general health not very good, came to see me in September last, about his eyes. I found him with one of the worst cases of pannus I had ever seen. The cornea were so thoroughly vascular that the pupils could scarcely be seen. He was unable to see more than to tell daylight from darkness, or white bodies. The palpebral conjunctivæ were thickened. After some weeks' treatment of lid they were greatly changed for the better. No treat-

ment to corneæ improved them any. He was also on general treatment at the same time.

"Finally, giving up all hopes of relief from the usual course, I told him frankly there was but one thing else I could advise with any prospect of relief. I stated the case to him plainly, telling him I would inoculate his eyes with pure gonorrhoeal matter; stated the pain he would suffer, the chances of ulceration and atrophy of the globe. I everted both upper lids and applied it thoroughly to them. In about three days the lids were swollen and cedematous, with some discharge from eyes. In a week the disease was well developed. I did not undertake to control it for about ten days. Then I used iced cloths locally, with a collyrium of tannic acid gr. xx to aqua dest.  $\mathfrak{z}$ j, dropped into eyes three or four times a day. In using this I usually direct that the eyes be thoroughly cleansed with cool water first; then the medicine dropped in; in a few minutes the eyes cleansed again, and the application repeated. Between these applications the eyes were thoroughly cleansed every hour or two. This prevented any increase of trouble and appeared to decrease amount of discharge some. After using this for ten days I ordered a collyrium of argent. nit. gr. j to aqua dest.  $\mathfrak{z}$ j to be dropped into the eyes every two hours; the iced cloths to be continued. Under this line of treatment discharge almost stopped in a week. I sent him to the country to remain three weeks. He returned a short time ago revealing remarkable improvement. The corneæ were very clear. Vision equal to  $\frac{1}{100}$ . He said he had no difficulty in going alone anywhere he wished. I should have said while in the country he continued the argent. nit. drops, and will add that there is not now nor will there be any staining of tissues from the use of the nitrate of silver. Five minutes after dropping the medicine in he usually bathed the eyes well in a weak solution of salt water. His sight is still improving."

In conclusion, he believes this to be the *only* remedy for pannus crassus; gonorrhoeal matter, or the discharge from purulent ophthalmia or from ophthalmia neonatorum can be used. Whatever the source, be sure it is pure.

#### Surgical Instruments in the Time of Galen, A. D. 259-268.

We make the following extracts from an interesting article published by Dr. Mook, in *L'Union Médicale*, on a number of surgical instruments belonging to the Third century, and found in excavations made in the Quartier St. Marcel, Paris, in October, 1880. All these articles were contained in a round bronze vessel, in which two buckles and seventy-five coins were found. The cutting instruments are represented by two double-edged knives with blades 2.5 inches long, and light hexagonal handles of same length, the whole made out of one piece. Another instrument of similar form, but with blunt edges, must have served the purpose of a spatula. Still another, may have been used as a spatula, but it differs greatly from the above: its blade is 0.40 inch wide by 2 inches long, with a thin, round handle 0.04 inch thick, by 2.80 inches long, having at its end an olive-shaped

ball 0.40 inch by 0.16 inch thick. The use of this is not very clear, it may have served as a probe, or even as a small canterly. Forceps are well represented. They are cut from a single piece of bronze, are beautifully finished, and have lost nothing of their elasticity. Two are pointed, and it would seem, were intended for the extraction of foreign substances, or fragments of bone. Two others, respectively 5.6 and 4.8 inches long, have flat jaws, curved inwardly toward each other, and 0.20 inch wide. A number of serrated forceps affect different forms. Some resemble the two preceding ones, while others have one of their jaws curved at a sharp angle from the axis of the forceps; the serrations correspond exactly, and are models of fine workmanship. An instrument having the form of a small spatula 1.20 inches wide, is adapted to a tubular handle 7.20 inches long, and was evidently used as an insufflator, for the purpose of introducing remedial agents into natural cavities.

The use and preparation of ointments must have held an important place in the medical practice of those days. Five gilt bronze tubes, each six inches long, were used for holding ointments, one still contains some, which has been preserved by the oxide of copper covering its surface.

We must mention a long-handled, half spherical capsule 1.6 inches in diameter, having a beak for pouring out liquids, and used, no doubt, for warming ointments.

We must also notice an instrument so different from any now in use that it is hard to guess its purpose. It is eight inches long, formed of two branches, articulated like scissors, and ending in a curved surface forming the fourth part of the circumference of an ovoid. When closed, this forms a space of about 1.60 of an inch; the handles are ornate, and the articulation nearer to the serrated end. This instrument, when closed, can be safely introduced in cavities, and wounds, and when open, it can grasp bodies, or resect tissues as an *écraseur*; at the same time it may be used as a *hæmostat*, and for removing detached fragments lodged in its concave surface.

There is also a flat stone, probably used for spreading ointment, and on which to sharpen the different instruments. All these instruments are made of bronze, containing some silver, a fact which has, no doubt, contributed to their excellent preservation.

#### The Alkaloids Derived from Protein Compounds.

The *Revue Médicale*, in noticing a paper recently published by A. Gautier on the above subject, remarks that in 1872, while investigating the reciprocal transformations of albuminoids, Gautier discovered that when fibrin from blood is allowed to putrefy under water, it becomes liquid, yields albumen, butyric and acetic acids, leucin, tyrosin, and leucine in large quantities, and besides these small quantities of fixed and volatile alkaloids.

Selmi also called attention to the fact that in the cadavers of persons who have died a natural death, the stomachs are found to contain compound substances showing the same reactions as

certain vegetable alkaloids, without, however, preserving their toxic qualities. These substances are not creatin, creatinin, or tyrosin, but are similar to those found in the alcohol used for preserving anatomical specimens. Selmigave those alkaloids the name of ptomaines, without, however, indicating how they were formed.

This was reviving Panum's sepoim, that fixed poison of purulent sores, comparable in its activity to the venom of serpents, or to curara or the vegetable alkaloids.

Now, according to Gautier, among the fixed and volatile alkaloids of cadaveric origin, some are inactive, while others, especially the fixed bases, are very venomous. The ptomaines usually found in the viscera of recently deceased individuals, generally show different reactions from those produced at a later period.

Among the fixed or volatile bases that are derived from cadaveric substances, there are several which can very readily be mistaken for some of the toxic vegetable alkalies; it is, therefore, highly important to distinguish between them, so as to avoid possible judicial errors, and besides prove the non-identity of those bodies with any of the vegetable alkaloids thus far known. We cannot give here all the details adduced by the author: he thus concludes: Unless in cases where morphine, apomorphine, liquid hyoscyamin, and muscarin are present, the instantaneous production of Prussian blue, in the neutral salt of an alkaloid derived from cadaveric substances, by the addition, first of ferric cyanide of potassium, then of dilute perchloride of iron, is an indication that, very probably, the alkaloid present is one of the ptomaines.

Alkaloidal substances are likewise formed in the ordinary process of tissue life, while the economy is in its normal state. They occur in variable proportions in bile, urine, and muscular fluid. They are a necessary component of certain very active normal secretions, such as venoms, which derive some of their properties from them. They apparently develop in considerable quantities under certain pathological circumstances, and are one of the causes of those functional troubles which follow in many diseases, especially when there is an exaggerated tendency to disassimilation, and above all, when the elimination of urinary products is obstructed. If our urine in its normal condition contains toxic substances analogous to those found in venom, it was natural to suppose that saliva would also contain them, since it is produced by glands similar to those supplying it in venomous snakes. It has, in fact, been found that human saliva really contains one or more of those substances, and although it differs in activity according to the time when secreted, it has proven itself venomous, at least for birds. It would therefore appear that the venom of snakes differs from human saliva, more in intensity of effect than in actual composition.

#### A New Solvent for Diphtheritic Membrane.

Dr. W. Hale White thus writes to the *Lancet*: I had been testing for some time the various solvents for diphtheritic membrane, such as lactic acid, etc., recommended in the text-books, and finding them all useless in practice I began to look

about for new ones. I accordingly procured a supply of acid glycerine of pepsin, in readiness for any case that might occur. The following are brief notes of the first case that I encountered:

Louisa D., aged two years and a half, was first seen on the morning of July 5th, 1881. There was extreme lividity, sucking in, and dyspnoea. I performed tracheotomy immediately (high operation). Instant relief was afforded, and the back of the trachea was inspected, but no membrane was seen. Accordingly a silver tube was put in, and the child did well till the evening of the 7th, when a small piece of membrane was coughed up. I therefore sprayed the throat with a Siegle's spray, putting half an ounce of the glycerine of pepsin in the glass bottle. This was done every two hours. On the morning of the 8th, as very little spray could be got down the tube, I put in Mr. Golding Bird's dilator (which the child continued to wear till the india-rubber tube was put in) and pulled up several pieces of membrane, and continued the spray. This treatment was continued till the evening of the 10th, when, as no membrane had been coughed up for twelve hours, it was left off. It was the opinion of all who saw the pieces coughed up that they had a very soft and gelatinous character, compared to the thick, tough pieces of membrane usually expelled. The case was a very bad one, as is shown by the fact that the quantity of membrane coughed up was very great, by the temperature rising to 104°, the child suffering from vomiting and diarrhoea, and also by its having a severe attack of syncope, from which it was with difficulty roused. An india-rubber tube was introduced five days after the operation. This was soon left off. The child continued to do well; but unfortunately some time after, owing to sudden changes in the weather, it got broncho-pneumonia, and died. At the post-mortem examination there was no evidence whatever to show that the pepsin had any ill effect at all upon the lungs, bronchial tubes, or trachea.

The pepsin was got to its active temperature by being immersed in water at 110° F. before use. I found that the water coming as spray from the boiler was not hot enough to destroy the activity of the pepsin, and as the child had a steam kettle attached to the tent the air in the trachea did not cool it. Of course the steam kettle was removed during the application of the pepsin. I do not think the chief good was done by the action of the pepsin on the large pieces of membrane lining the trachea and larger bronchi, but by its getting thoroughly mixed with the secretions in the small tubes and preventing the formation of membrane there, for it is always found post-mortem that it is the blocking up of these that has killed, provided the child has died simply from the effects of the membrane, without any complication.

It may be mentioned that any one can convince himself of the power of the glycerine of pepsin to dissolve diphtheritic membrane by putting a piece in a test tube, with some of the fluid, and maintaining it at a temperature of from 100-110° F., when it will be seen to be digested rapidly.

This one case he hopes may induce others to try the remedy and furnish their experience. The preparation used by him contained less gly-



cerine than the usual preparation, so that it might more readily pass through the fine tubes of the Siegle spray.

## REVIEWS AND BOOK NOTICES.

### NOTES ON CURRENT MEDICAL LITERATURE.

—*The Medical Register* comes to us as the successor of the *American Specialist*. It will be published monthly, with the design of conveying careful criticisms and reviews of new books, with short articles of interest to the profession.

—We have received the twenty-seventh annual report of the Board of Managers of the Howard Hospital and Infirmary for Incurables.

—The Trance State in Inebriety; its Medico-legal Relations, by T. D. Crothers, M.D., Superintendent Walnut Lodge, Hartford, Connecticut, with an Introduction on the Nature and Character of the Trance State, by George M. Beard, M.D., comes to us in the form of an essay, read before the New York Medico legal Society.

—We have received the second annual report of the Newark Charitable Eye and Ear Infirmary.

—“Observations on the Part the Obstetrical Forceps Plays in the Indication and Prevention of Perineal Lacerations,” by Thos. A. Ashby, M.D., comes to us in the form of a reprint from the *Maryland Medical Journal*. Among other conclusions, he states that “the forceps gives the obstetrician perfect control over the head when arrested at the outlet. It may be used advantageously to rotate, extend or retard the movements of the head. By the exercise of this power the head may be made to execute the natural evolutions, and thereby prevent undue injury to the perineum.”

—Nervous Shock as a Therapeutical Agent, by Romaine J. Curtiss, M.D., Joliet, Ill., comes to us in the form of a reprint from the *St. Louis Medical and Surgical Journal*. After reciting many illustrative cases, the author expresses his belief that in time it will be recognized that the operations of iridectomy or that for pterygium will have as beneficial an effect upon atrophy of the optic nerve, when they co-exist, as the operation of circumcision has been known to have, when phimosis was co-existent with such atrophy.

—*Godsey's Lady's Book* for March is full of good things. The steel plate, “The Little Pilferer,” tells its own story, and the colored fashion plate is a gem. The novelette is from the pen of

Mrs. M. Sheffey Peters, and is one of the very best of the series of complete novels given in the *Lady's Book*. The illustrations, stories, etc., are all first-class.

—We have received the Fifth Annual Report of the Managers of the Sanitarium Association of Philadelphia. This is a most worthy organization, whose purpose it is to take the little children of the poor from their crowded homes to an island in the river, where they may inspire pure air. Contributions can be sent to the treasurer, Dr. Eugene Wiley, 330 Reed St., Phila.

### BOOK NOTICES.

**Percussion Outlines.** By E. G. Cutler, M.D., Assistant in Pathological Anatomy, Harvard Medical School, etc. etc., and G. M. Garland, M.D., Assistant in Clinical Medicine, Harvard Medical School, etc. etc. Boston: Houghton, Mifflin & Co. 1882. pp. 75. Price \$1.50.

This is a valuable book. The majority of general practitioners are very inferior in physical diagnosis, and among the reasons for this deficiency stands prominently the fact that they are not familiar with the normal outlines of the various organs; hence they are unable to diagnose accurately by percussion any increase or diminution of size. This book will supply to them this requisite knowledge. It contains eleven illustrations, with explanatory texts.

**An Index of Surgery, being a Concise Classification of the Main Facts and Theories of Surgery; for the use of Senior Students and others.** By C. B. Keetley, F.R.C.S., Senior Assistant Surgeon to the West London Hospital, etc. pp. 208. Price \$1.00. New York: Bermingham & Co. 1882.

This book is a cheap compendium. It contains in a very concise and very stilted manner the prime elements of surgical knowledge; to those for whom the author (in his preface) says he intends it, it may be of some service.

**The Sanitary Drainage of Houses and Towns.** By George E. Waring, Jr. Second Edition, Revised and Enlarged. pp. 366. Boston: Houghton, Mifflin & Co. 1881.

This is a very valuable work for all classes. Physicians will learn much of value from it, while any layman about building a residence should be advised to consult its pages, in order that he may surround himself with all possible barriers against the introduction of disease. Colonel Waring is thoroughly conversant with his subject, which he has here presented in an attractive and entertaining style.

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**THE LEGAL RESPONSIBILITY OF PHYSICIANS**

There are very few medical gentlemen who thoroughly realize the importance of some knowledge of the legal responsibilities they may incur in the daily routine of the profession. The *British Medical Journal*, in a recent issue, relates several striking instances of this unsuspected danger. In one case a woman arrested on suspicion of having concealed the birth of a child was examined by the Police Surgeon, to ascertain whether she had recently been confined or not, although she had previously confessed to the birth, and remarked that "there was no use in examining her." She subsequently brought an action for damages against this physician, on the ground of assault; the presiding justice charged the jury in these words: "*Before the examination took place she admitted having had a child; the jury must ask themselves, if that admission was made, why examine further; there was no legal authority whatever to examine this girl.*" After a short absence the jury returned a verdict of one hundred and twenty-five dollars damages for the plaintiff. Some years ago one of our

most prominent surgeons in this city was called upon to attend a fracture of the femur. The bone was set and the limb placed in proper position, while careful instructions were given for future management, and absolute rest enjoined. The latter injunction was disobeyed, erysipelas supervened, and shortening of the leg was the result. A suit for damages followed, and while the surgeon was successful, yet he was forced to much undeserved expense and annoyance. Many such cases are reported and could be cited to point our position. We must ever remember that there are many unprincipled persons in the world, and also anxious, eager, vulture-like lawyers, ever ready to whisper into the ear of a willing client, "Sue him for damages; he has money; he has treated you badly, make him pay for it;" and there are many ready and willing to listen to this evil advice. Some of the English courts hold that whenever a physician makes an examination of a woman without having her clearly expressed consent he is guilty of *assault*. She may not *resist*, they claim, because there may be, to her knowledge, some collateral circumstances capable of forcing her acquiescence if she does refuse; though these fears may not be well grounded, yet if they seem to her sufficient to make resistance, to her mind, useless, then such an unwilling examination constitutes assault. They even decided, as far back as 1824, "*That if a medical man unnecessarily strip a female patient, under the pretence that he cannot otherwise judge of her illness, it is an assault, if he himself takes off her clothes.*"

These decisions are all eminently just and proper. Morality is one of the greatest foundation stones of social prosperity, and must be most zealously guarded. The purity and privacy of the female must be rigidly maintained, if morality is to be encouraged, and this barrier which must ever surround the modesty of women can only be passed when the absolute necessities of deranged health imperatively demand it, and then exposure must only be carried to such a degree as is indispensably necessary. These decisions are based on the *unnecessary* exposure of the female, and are, therefore, just.

Since there are many women who are ready to be induced to bring suit against physicians on the slightest provocation, or even, indeed, without any just cause at all, it, therefore, will be a wise precaution to bear ever in mind the fact that it has been decided that examination without express consent constitutes assault.

To avoid this pitfall, in which many have and many more will innocently find themselves, unless they heed this caution; it should be made a rule to previously obtain full and free consent from a woman, before a witness or witnesses, ere you undertake an examination, and to surround yourself with the additional safeguard of a witness during the operation. The relations sometimes existing between physician and patient are of an extremely delicate nature, and unless carefully and cautiously conducted, may, in certain instances, redound greatly to the detriment of the physician.

#### NEW REMEDIES.

In this age of medical progress, new medicinal remedies are being constantly brought before the profession. It is hardly possible to pick up a good medical journal without meeting an account of some hitherto unheard-of drug which is reputed to be of great service in the cure of some particular diseased conditions. In truth, to such an extent has this introduction of new drugs been carried that a journal appears in New York devoted to the chronicling of their advent into public notice. The majority of them are subsequently found to be worthless or even worse, to be really injurious, and are discarded. We have now, and have had, certain good, reliable friends in the materia medica, that have done good service for our fathers and our grandfathers before us, and are still potent for good; such as opium, quinine, digitalis, strychnia and the like. Of the new remedies, with the exception of such really valuable additions as jaborandi and a few others, they live a short time and pass away, forgotten and unmourned, because they possessed merit only in the imagination of their introducers.

We do not desire to advocate *old foggism*; far

from it; we are champions of progressive medicine; but in our science, as well as in every other human pursuit, a rational amount of conservatism is commendable. We must receive with a good many grains of salt the glowing accounts of wonderful cures by unheard of drugs that so often attract in the journals. The majority of medical men are ambitious to discover some new drug more potent than any in use. Hence, when they have used such a remedy in, maybe, but a single case with a successful result, they do not stop to consider whether this patient might not have recovered if let absolutely alone, but straightway rush into print with what they consider a great discovery. Therefore would it be better for physicians to put their trust in well tried remedies, and not to *experiment* with all the new ones they hear about, until their merits have been absolutely proven.

#### THE DANGERS OF CATHETERISM.

A recently reported case in London, where death occurred as a result of the passage of a catheter, furnishes a lesson for all to remember. It is well known that the introduction of this instrument, even in those of sound and vigorous constitution, has, in not a few cases, been followed by severe rigors and death. Why this should be so is not positively demonstrated, though it would be rational to suppose that its action was due to the impression made on the nervous structure of the sexual organs, and transmitted from there to the vital nervous centres. The nature of the impression we know not; but we do know how to avoid it, and this, after all, is the important practical point. In the London case, after the introduction of the instrument, the man was allowed to walk away and do as he chose. He was soon after taken with severe urethral hemorrhage, which had occurred in a slight degree at the time of the operation, and died in three days. To avoid these accidents, the following rules should invariably be observed, else, if you neglect them, you may, knowingly, be the cause of severe trouble, and maybe death.

1. Place the patient in bed, *between blankets*.
2. Warm the catheter to such a degree (by dip-

ping it in hot water or other means) that it will feel warm, *not hot*, to the back of your hand.

3. Oil it well and introduce *without using the slightest force*; if you do use force, you will be very apt to lacerate the urethra, and possibly to produce a false passage, with all its subsequent horrors. 4. Keep the patient in bed, between the blankets, for at least an hour after all the nervous excitement caused by the operation has subsided, and give him a big dose of quinine, from five to ten grains. By observing these simple precautions you will almost never have any resultant trouble from the passage of a catheter in a healthy man.

#### VIVISECTION.

In a recent issue, the *London Medical Times and Gazette* criticises an article in the "*Fortnightly Review*," from the pen of the famous Lord Coleridge, against vivisection. There always have and always will be two parties to this question. The subject has been thoroughly discussed, and yet stands to-day as it did in the beginning. What is the use of wasting time and mental force on these elaborate arguments concerning the justice or morality of vivisection. The practical point that must stare in the face of all, whether they favor or oppose it, is, that it will continue to be, in spite of all the anathemas hurled against it. So long as man exists, so long will there be found enthusiastic students of physiology, and by them vivisection *will* be practiced, whether sanctioned or not, since they deem it necessary to the pursuit of their studies. Dissection of dead human bodies is forbidden in some places, with the result that graveyards are robbed and dissection goes on all the same. So with vivisection; it ever will be a fact, openly, or secretly; why, then, waste time writing or talking about it?

### NOTES AND COMMENTS.

#### Linear Scarifications in Lupus.

This method of treatment, which has received special attention in England, from Balmano Squire, and in France, from M. Vidal, of the St.

Louis Hospital, has already rendered the greatest service in this terrible disease.

This method was first brought forward by Balmano Squire, but has been much simplified by M. Vidal, who immediately commences the treatment by scarifications without preliminary cauterization with chloride of zinc. M. Vidal uses a very narrow, sharp knife, and makes long, superficial linear incisions over the whole of the affected surface; the incisions are made very close together, and there is considerable effusion of blood, which is, however, very soon arrested.

We have very frequently seen the little operation performed by M. Vidal, and it caused considerable pain at the moment, but not of long duration. The results obtained were often excellent, the cicatrices smooth, without induration, and often hardly perceptible.

In his "*Lçons sur le lupus*" (Paris, 1879), M. Vidal says that this treatment is excellent in tuberculous lupus and in lupus of mucous surfaces, but does not give as good results in the erythematous form, and particularly in the acneiform variety, of the disease.

This mode of treatment is very much used by the physicians of the St. Louis Hospital, and, according to MM. Lailler and Besnier, gives better results than the modifications of the method proposed by Dubini and Schiff, who recommend introduction of minute quantities of caustic substances into each tubercle by acupuncture.

#### The Treatment of Whooping Cough.

In the *Allegemeine Med. Cent.-Zeitung*, Dr. Elben says that he has treated whooping cough in a great many ways: he has tried inhalations of tannin, quinine internally, and insufflations of quinine and bicarbonate of soda. He then returned to belladonna, chloral and morphine. In particularly serious cases, in which children were in danger from want of sleep, or owing to vomiting of all food, he has exhibited morphia in bold doses with excellent results; great prudence should of course be observed in using this remedy, and the first symptoms of intoxication must be carefully watched. In some instances bromide of potassium brought relief, but in others it was of no avail.

In three cases Dr. Elben has had occasion to try oxalate of cerium, as recommended by Morgé. To his surprise, he observed such marked progressive improvement, especially in patients suffering from severe attacks of cough and vomiting, that he was induced to suspend all other medication.



In one case he discontinued the cerium and replaced it by morphia; then, finally, all remedies were withheld. In each instance the disease became aggravated, thus warranting the belief that the remedy possessed specific qualities. For children one to seven years old, the dose of powdered oxalate of cerium is from 0.03 to 0.18 grm. (grs. 0.45-2.70), to be taken at one time, and while fasting; later in the evening another similar dose is to be given.

#### Regeneration of Nerves.

At a recent meeting of the Société de Biologie (January 21st), M. Brown-Séquard related that, in forcibly elongating the sciatic nerve of a monkey rupture took place. The two ends of the nerve were resected, as far as possible, at the superior and inferior extremities of the wound.

After two months the animal had recovered neither the motility nor sensibility of the muscles under the dependence of the resected nerve; nevertheless, at the autopsy it was found that the nerve had been completely regenerated.

At the superior part of the wound it was continuous with the primitive nerve, and below, without apparent demarcation, with the popliteal branches.

The new nerve, it is true, had not recovered all its connections with the medulla, but its complete reparation in so short a space of time was truly remarkable.

#### Treatment of Pigmented Spots on the Skin.

Dr. Unna, of Hamburg, recommends the application of simple mercurial plaster, or a plaster made with white precipitate over the colored spots. The skin is first sponged off with Cologne water, or alcohol, and then the plaster in narrow strips is applied, and left on during the night. During the day the following pomade, innocuous to the skin, and much used as a face application by the high society of Vienna, is recommended in the *Berlin. Klin. Wochenschr.* :—

R.	Bismuth. subnit.,	℥ iss
	Kaolin,	℥ iss
	Vaselinae,	℥ vj to ℥ iss. M.

This preparation is applied over the affected parts, and, in conjunction with mercurial plaster, effects a rapid cure.

#### Alveolar Osteo-periostitis in Diabetes.

The *Concours Médical*, for January 14th, 1882, observes: Diabetes was again the subject under discussion at the last sitting of the Academy, and M. Magitot presented the results of his

labors on the "Diagnostic Value of Alveolar Periostitis of the Jaws in Diabetes Mellitus." His conclusions were as follows: 1st. An examination of the mouth will invariably furnish a sign for the diagnosis of diabetes mellitus. 2d. This sign is a lesion of the alveolar edge, known under the name of alveolar osteo-periostitis. 3d. This indication of diabetes, which appears in the first stages of the disease, continues throughout its duration, and under certain circumstances, acquires all the importance of a revealing sign. 4th. A simple deviation of the teeth serves as the first indication of diabetes. The second period in the disease, when it has become general, is marked by loosening of the teeth and alveolar catarrh. The third period, that is, when the teeth drop, corresponds with the most advanced stage of the disease. 5th. Beyond this last period, if diabetes continues its evolution, the alveolar edges may become the seat of an osseous reabsorption, either consecutive or not to gingival gangrene.

This last indication is a critical one, and as a rule, closely precedes a fatal termination of diabetes.

#### Salicylic Cream.

Dr. Matthews Duncan recommends, in the *Lancet*, salicylic cream, prepared by mixing one part of the powdered acid with four or five of glycerine, as a valuable means of keeping sponges, tents, instruments, etc., aseptic in the vagina. It had been suggested to him by Dr. Alexander Ogston, of Aberdeen, and he had used it with success in inducing premature labor, and other operations.

#### Rheumatism as a Cause of Purulent Conjunctivitis.

Blennorrhagia has been generally considered as a cause of purulent conjunctivitis, but M. Perrin has had occasion to observe a number of cases in which surrounding circumstances precluded the possibility of blennorrhagic infection, but distinctly pointed to rheumatism as the determining cause. The *Concours Médical*, from which we quote, adds, that M. Perrin, in submitting the results of his observations to the Academy, said that rheumatism of itself could determine urethral discharges similar to those from blennorrhagia, and which, in such cases, would be an effect, instead of a cause. He was, therefore, inclined to believe that urethral, ocular, and other symptoms might be superinduced by a rheumatismal condition, developed by various circumstances, and attended by simultaneous, or successive manifestations, but which,

according to individual predisposition, would become localized in the conjunctiva, the urethra, or often in the articular system. In commenting on this question, M. Gosselin remarked that he had never observed anything similar to the facts reported by M. Perrin; he availed himself of the circumstance, however, to call attention to the good effects of dilute alcoholic lotions (dilutions of one-fourth or one-fifth), in the treatment of purulent conjunctivitis.

#### Local Treatment of Aphthous Stomatitis.

A late issue of the *Therapeutique Contemporaine* gives various formulæ which have proved useful in these obstinate diseases of the mouth.

The antiseptic gargle of the Brompton Hospital has often proven of great service; it consists of—

R.	Aluminis,	gr. xvj.	
	Tr. myrrhæ,	℥ iss	
	Aquæ destil.,	℥ iv.	M.

This may be used to touch the aphthæ, and also as a gargle.

If the disease proves obstinate, and no beneficial effect is obtained from the above mixture, Tommasi recommends the following powder:—

R.	Calomel.,	℥ ss	
	Amyli pur.,	℥ ss.	M.

Apply a small quantity of this over the surface of the aphthæ.

Thompson recommends in the same conditions the following composition:—

R.	Tr. opii,	℥ xlv	
	Tr. catechu,	℥ iiss	
	Ac. sulphuric. dil.,	℥ xlv	
	Aq. rosæ, ad	℥ vss.	M.

The points affected should be touched with a camel-hair pencil saturated with this mixture.

#### Cause, Nature and Treatment of Yellow Fever.

Dr. Domingos Freire has published (Rio Janeiro, 1881) a monograph bearing the above title.

As he found in the dejections, the saliva, and the blood of yellow fever patients, numbers of microscopic organisms, bacteriæ and cryptococci, he comes to the conclusion that the disease is of an infectious nature. And as the salicylate of soda had been much recommended in analogous affections, such as septicæmia, variola and typhoid fever, he determined to investigate its effects in yellow fever.

He had administered the medicament hypodermically, in doses from 2½ to 22 grains, according to the intensity of the fever, in the first period of the malady. In the second period, the dose

should be smaller, as it then acts as an antiseptic; it is of no service in the third period, when black vomiting has commenced.

Dr. Freire reports several cases with favorable issue under this treatment.

#### Hypertrophy of the Heart in Bright's Disease.

In a recent communication to the Soc. de Biologie, M. Straus gave the results of clinical and experimental researches which he had undertaken, to determine the relations existing between renal lesions, whatever their origin, and cardiac hypertrophy.

The existence of such hypertrophy has been admitted without contest since the days of Bright and Traube, and the troubles in the renal circulation were considered sufficient to explain a compensatory hypertrophy of the left heart. More recently, Gull and Sutton have considered that the elevation in arterial pressure and the consequent cardiac hypertrophy was due to a form of generalized arterio-sclerosis affecting all the peripheric arterioles.

Finally MM. Debove and Letulle have described a species of hypertrophic myocarditis with sclerosis, in Bright's disease, which would seem in some cases to exist primarily and have no connection with atrophy of the kidneys.

M. Straus sought, in his experiments, to provoke nephritis in one kidney of the animal operated upon, examining, a considerable period later, the condition of the heart. He has been preceded in this species of research by Bettmann (1858), by Simon in 1871, and more recently, by Gravit and Israël; in many cases these observers found cardiac hypertrophy without alteration in the second kidney, while in many of the full grown rabbits the other kidney was enlarged, without cardiac alteration.

M. Straus tied the left ureter in twenty guinea-pigs, and with proper antiseptic precautions recovery was in all cases rapid. On examination, a considerable period later, there was considerable distention of the ureter and the pelvis of the kidney, with atrophy of the organ itself; the weight of the second kidney was twice that of the organ in the normal condition.

There was manifest hypertrophy of the left ventricle of the heart, which was demonstrated by weighing, the organ being about one-fourth heavier than normal.

From these experiments, M. Straus considers it decisively proven, that in Bright's disease the cardiac hypertrophy is due or has its origin in the renal disease, and certain cases observed in practice confirm these results of experimentation.

In two cases of uterine cancer, with compression of the ureter, hypertrophy of the heart supervened, notwithstanding the cachectic state of the patients. The heart weighing in one case ten and in the other eleven ounces.

#### Chloroform in Cholera.

M. Despres gives, in the *Bulletin de Therapeutique*, a treatment recommended by him in 1857, and which was found very useful in the terrible epidemic at Damas, in 1875, and in India, in 1876 and 1877, the following potion constituting the basis of the treatment:—

R. Chloroform.,	℥xv
Alcohol.,	℥3 ij
Ammonie acetat.,	℥3 iiss
Syr. morphie chlorhydrat.,	℥3 j-3 ij
Aquæ,	℥3 iiss. M.

Sig.—Teaspoonful every half hour.

Chloroform thus administered seems to act on the spasms and contractions of the stomach.

Liquids introduced in very small quantities are no longer vomited, the medicament favors absorption, and as it is very rapidly eliminated, accumulation of action need not be feared.

Without insisting on the theoretic part of the treatment recommended in M. Despres' memoir, it must be said that M. Follet, who followed out the treatment at Pondicherry, had a mortality of but 29 per cent., while under other methods of treatment the mortality reached as high as 80 per cent.

This method of treatment is applicable only during the first period of cholera; as soon as the period of reaction sets in the employment of stimulants and narcotics is of more doubtful benefit, and treatment should be modified according to the symptoms and indications.

#### Smallpox Disinfectants.

From the *National Board of Health Bulletin* we note the following methods for smallpox disinfection, ordered by the Illinois State Board of Health. The best disinfectants are, sunlight, fresh air, soap and water, thorough cleanliness, for general use. For special purposes the following are the most efficient, the simplest and the cheapest: 1. *Copperas disinfectant*.—Sulphate of iron (copperas), one and one-half pounds; water, one gallon. A convenient way to prepare this is to suspend a basket containing about sixty pounds of copperas in a barrel of water. The solution should be frequently and liberally used in cellars, privies, water closets, gutters, sewers, cesspools, yards, stables, etc. 2. *Sulphur disin-*

*fectant*.—Roll sulphur (brimstone), two pounds, to a room ten feet square, and in the same proportion for larger rooms. When using this, have all windows, fire-places, flues, keyholes, doors, and other openings, securely closed by strips or sheets of paper pasted over them. Then place on the hearth, or stove, or on bricks set in a wash tub containing an inch or so of water, an iron vessel containing live coals, upon which throw the sulphur. All articles that cannot be burned, on account of their value, must be left in the room, while this fumigation must last for twenty-four hours, and may be repeated, when the doors and windows should be left wide open for two or three weeks. 3. *Zinc disinfectant*.—Sulphate of zinc (white vitriol), one and one-half pounds; common salt, three-quarters of a pound; water, six gallons. Into this solution all clothing, blankets, sheets, towels, etc., used about the patient should be dropped immediately after use, and should be well boiled as soon as practicable. Into this solution ought to be dipped the outer wrap of any visitor when he leaves the room. In the event of death, the body should be wrapped in a sheet thoroughly saturated with this solution. 4. *Thymol water*.—Made by adding one teaspoonful of spirits of thymol to a half gallon of water. Spirits of thymol is composed of thymol, one ounce, alcohol, 85 per cent., three ounces. This may be used for the same disinfecting purposes as carbolic acid; it is quite as efficient and has an agreeable odor. When thymol is not available, chloride of zinc solution may be used, half an ounce of chloride of zinc to one gallon of water.

#### Contagious Pneumonia.

In our issue of February 11th we presented a note on *Contagious Pneumonia*; in continuation, we find some fresh information on the subject from the *Lancet*, in which Dr. Frederick H. Daly says: "I do not mean by *contagious pneumonia*, septic, epidemic pneumonia; I do not mean a blood poisoning from—say an insanitary state of a house or a neighborhood; nor yet do I mean the so called diphtheritic pneumonia. I desire to discuss whether there exists a variety of pneumonia beginning with rigors and high temperature, and communicable from person to person, as in smallpox, measles, and scarlet fever. He relates several cases to illustrate his argument. He was consulted by a lady about one of five children who had been unwell for several days, with symptoms of fever and incessant cough. A simple diaphoretic mixture was ordered, and in a few days the boy was quite well.

Nine days subsequently he was summoned to see two of the other children, and found them suffering from undoubted pneumonia. These children had been kept in the same room with the first child. Four days after the beginning of their illness (all of which terminated favorably), the mother was taken sick, as well as the youngest child. The mother had a rigor, pulse 126, temperature 104.6°, tongue coated; constantly coughing, but no expectoration, with a violent pain under the left breast. Fine crepitation all over the left chest soon developed and passed rapidly into consolidation, and death ensued. The child taken sick with the mother presented symptoms of pneumonia, but recovered. The grandmother, aged sixty, a remarkably healthy looking woman, came to nurse her daughter. The evening after her daughter's death she was taken suddenly ill, with a well marked rigor, temperature 105.2°. The next morning there was fine crepitation at both bases and great dyspnoea; well-marked pneumonia was diagnosed, and she died six days after her daughter. A careful physical examination of the first case was now made, when the left lung behind gave evidence of recent consolidation, while the history of the child's illness, the sudden improvement from being so ill, the fever, the cough, every symptom, indicated that this was the first case of pneumonia in the house. I do not think there can be any doubt that there had been in this house six cases of pneumonia, two proving fatal, in about a fortnight. There was no reason to suppose that the disease was that variety of pneumonia described as epidemic, and which has been associated with general unsanitary conditions, such as overcrowding and bad ventilation. My cases support the theory that this disease is a specific fever, of which the lung disease is only the local effect. The servants in the house, who were but little in the sick room, escaped the disease." In conclusion, he says, "We know that certain forms of blood-poisoning can produce pneumonia; such as albuminuria, erysipelas, and measles, most probably. I ask is there still another cause of the disease, not generally, if at all, recognized, viz., direct contagion?"

## SPECIAL REPORTS.

### NO. IV.—ADULTERATIONS.

Adulteration contaminates everything we use. Let an article of food become desirable and valuable, and straightway some rascal is prepared to get up some cheap resemblance to it, by which

it can be adulterated, and more money made for the tradesman. Some of these adulterations are positively injurious to health, while the remainder, though harmless, yet are morally wrong, since we are called upon to pay for what we do not receive. When a man buys a pound of sugar, he ought justly to receive a pound of sugar, and it is an act of injustice and a crime if, through the machinations of man, he receives only three quarters of a pound of sugar and a quarter of a pound of some white earth, which, though harmless, does not possess the properties of sugar. It is a species of robbery, and ought to be exposed. During the past year much light has been thrown upon the question, and the crooked ways of those who adulterate have been made more familiar. Therefore, a report of recent developments in this line will be productive of good, by warning you and showing you how to detect adulterated articles. Legislation can do much to effect a reform, but the public can do still more. If every one knew how and would test every article they purchased, the tradesmen would be afraid to sell adulterated goods, when they knew that detection, loss of custom, gossip and subsequent failure would be the result. Too much attention cannot be directed to this point since in many cases it will be the unsuspected cause of undermining the constitution and producing a condition of chronic ill health. In this journal, last September, it was stated that a municipal laboratory had been recently opened in Paris, where anybody can have analyzed, for a small fee, samples of food, drinks, or anything connected with hygiene. Several samples of butter were found to be made with oil or suet, which were easily separated. This brings up the much mooted subject of oleomargarine. It seems to be the present belief of those most capable of judging and expressing an opinion, that while oleomargarine is not exactly identical in composition with good butter, and does not contain the same elements of nutrition, yet its use is admissible, since it is not absolutely injurious. Dr. CUTTER, of New York, in the course of an article on butter, says: "To conclude, butter is good nerve food; oleomargarine honestly made may not be unhealthy, but it cannot, in our opinion, take the place of the normal products of the protoplasm of the mammary gland." The *Pacific Medical and Surgical Journal*, says, "From the first we have regarded this product (oleomargarine), as a contribution from clinical science to domestic economy, in the interests of the human family. Were it not for the motives of trade, and the fears of



competition on the part of the dairymen, there would have been but little question on the subject. The case is one of selfishness and prejudice, arrayed against the interests of the people, the poorer classes more particularly. Professor CHANDLER, State Chemist of New York, recently reported that it was superior to low grades of dairy butter; that there is nothing objectionable in the material, and that he sees no necessity for legislation concerning its use." On the other hand, Prof. RICHE, read the official report of a commission appointed to investigate the propriety of substituting artificial for natural butter, in the French insane asylums, before the Académie de Médecine, in which the following conclusions appeared:—

1st. It appears, from three years' experience at St. Anne, at Vacluse, and at Ville Evrard, that the employés and some patients could not endure this alteration in the usual fare.

2d. The alimentation, and, therefore, the preservation of health of extra-sensitive and very delicate patients would be unfavorably affected. In any case it would be a serious change in the regime of those whose constitutions were already worn out.

3d. Oleomargarine is a manufactured product, and so open to fraud; it is well known that vegetable oils are used. Moreover, experience shows that some time is required for a stomach accustomed to food cooked in fat to become habituated to that dressed in oil, and physiological researches prove that vegetable oils are less easily digested than animal fat.

4th. Fatty substances are only absorbed into the system in the state of emulsion. Chemical practice and culinary experience having shown that oleomargarine does not emulsify so readily as butter, and that the emulsion of the former is not as stable as that of the latter, it is reasonable to conclude that oleomargarine is not so easily assimilated as butter.

It is therefore proposed that the commission should reply to the Minister that the Academy considered the proposed substitution inexpedient, and this proposition being put to the vote, was unanimously approved.

Last year the Public Health Committee, of New York took up the matter, and investigated it thoroughly. After taking into consideration the French observations, noted above, it was found that there is a very great mass of testimony from various experts in favor of the article in question. Sanitarians, chemists and physiologists all endorse it as a useful, harmless and palatable addition to our food products.

They recognized the possibility that the new butter is not so digestible as the old. This is an argument for its being sold under its own name, but not for any actual restrictions upon its sale or manufacture. There is, perhaps, a future

danger in a less careful process of manufacture than now exists.

As establishments increase and competition becomes more active, the scrupulous care now said to be exercised may relax. This, however, would only justify the existence of official inspectors, and not the abolition of the industry.

The dairy interests in our State Legislature are very great, and the question of the food value of oleomargarine may be settled in the interests of this class rather than in that of the people. But it is to be hoped that the State will not interfere any further than to furnish assurance that the article is carefully manufactured, and is not being sold under any other than its own name.

As an evidence that the fear expressed, that adulteration would creep into the manufacture of oleomargarine, was not unfounded, *Gaillard's Medical Journal* tells us that "The success of butter made from beef fat (oleomargarine butter) has led to the use, in Chicago, of pork fat or lard for the same purpose. It has been reported that large quantities of this fraudulent butter have been shipped to England, seriously injuring the market for genuine American butter. The report is disputed by exporters, though it is admitted that sample lots have been sent by New York and Chicago dealers. Obviously, if lard butter is wholesome, and of good flavor, it can be sold on its merits; if bad, it should not be sold at all. In either case its sale as genuine butter would be a fraud and should be prevented."

Thus, then, to sum up, it would seem that there is nothing morally wrong nor physically injurious in the sale and use of oleomargarine; with these two restrictions: 1st. That it be distinctly labeled and sold as such; 2d. That it be sold at a lower price than genuine butter. It really constitutes a benefit to the poorer classes, since it enables them to enjoy a luxury hitherto denied them on account of its expense. Since it is harmless, it is brought down to a question of desire. If poor people, or any other class, desire to use oleomargarine, there is no valid reason why they should not do so; but it is only just that they should know what they are using, and should be able to procure it at a lower price than the more expensive genuine article. If legislation will force these artificial manufacturers to properly label this article of merchandise, the people will force the low price, by refusing to buy it at a high figure. Until this honest labeling becomes compulsory and universal, physicians and others ought to know how to detect the artificial from the genuine butter. Dr. G. C. WITTSTEIN, in an Austrian pharmaceutical jour-

nal, thus explains the simple method of distinguishing them: "Place a small piece of butter on an object glass, spread it out by means of a cover-glass, and observe it under a power of three hundred to four hundred. If it is pure butter, the whole field is filled with extremely fine globules, which are entirely destitute of any approach to crystalline form. If the butter is artificial, or a mixture of both, the field presents numerous angular or acicular particles between the globules. These crystalline particles are derived, no doubt, from the stearine which forms part of the beef-tallow in artificial butter. Lard does not show any such crystalline particles."

#### Milk and Cream.

At the Paris laboratory, a sample that was exhibited as cream, and which appeared as natural as possible, and of excellent flavor, was found to have been manufactured with the residue of some red dye, mixed up with oil and sulphuric acid, in certain proportions. It is well known to every one that no article of food is so liable to contamination or adulteration, from carelessness or design, as milk. But the belief must only be the more strongly impressed by the recent report of Mr. EARNEST HART, the editor of the *British Medical Journal*, to the London Congress, when from a tabular abstract, made from a study of seventy-one recent epidemics due to infected milk, he made the startling statement that as many as thirty-five hundred cases of typhoid fever, eight hundred of scarlatina, and five hundred of diphtheria, could be directly traced to the drinking of impure milk. Dr. E. F. BRUSH, of New York, calls attention to the danger of feeding infants with milk taken from a cow only a few days after she has calved. The milk contains *colostrum*, which will produce severe symptoms of cholera infantum. Many dairymen, some through ignorance and others through carelessness, will mix this early milk with that from other cows, which then constitutes a dangerous adulteration. He cites the case of a breeder of fine stock, who allowed his calves to suckle their mothers as soon as they were born. They grew rapidly, were fat and sleek, and excited the admiration of the breeders of the neighborhood. But when warm weather came they all sickened and died. Subsequently he fed the calves artificially for a few days and had no more trouble.

It is hardly necessary to detail the well known fact that infected milk is one of the principal carriers of the typhoid fever poison; but the following case, which we believe has not yet appeared in print, will be instructive, as it shows

more clearly than any we have ever met how extremely sensitive milk is to the influence of poisonous germs. A case of typhoid fever occurred in the house of a neighbor of a dairyman. The dairy was situated several hundred yards from this house. There was no water communication between them. The clothes and bed clothing of the patient were hung out to air. Very soon an epidemic of typhoid fever, commencing in the members of the dairyman's family, who were especially fond of milk, broke out, and was confined to those persons supplied from this particular dairy. Upon investigation, it was demonstrated that the only possible way in which this milk could have become contaminated was by the influence of the wind carrying the disease germs from the infected clothing toward the dairy. Since the presence of disease germs really constitutes adulteration of milk, though we believe, in the majority of cases, unintentionally on the part of the vender, it behooves every one to always remember and realize the readiness with which milk can absorb injurious elements. Since in many cases it is impossible to say how these disease germs may enter the milk, or to determine accurately, even by the most careful analysis, whether or not milk may contain some elements inimical to health, it becomes absolutely imperative that the two following rules should be scrupulously observed on all occasions: 1st. No milk should be allowed to be sold from any dairy in the vicinity of which there may exist any contagious disease; 2d. No milk should be allowed to be sold from cows that are in any way at all out of health. These two conditions can be carried out by the rigid enforcement of the following measure: In addition to the present inspectors of milk, or rather, in place of them, who examine and test the fluid when it has reached its destination, and who are of very little service, since they cannot possibly (because we have no means of doing so) detect the presence of disease germs, the surrounding country from which our large cities derive their milk supply should be divided into districts, with an inspector for each. This man should be a *practical* one, with a thorough knowledge of all the diseases of cows, and the means of recognizing them. It should be his duty to daily inspect the various dairies and ascertain the condition of the cows. By visiting the physicians of the neighborhood, he could find out whether any infectious or contagious disease existed in the vicinity of any dairy, and putting these two inquiries together, he could decide whether the milk supplied by any particular man would be liable to

convey disease. If any particular cow in a herd were found diseased, he could warn the owner to throw this milk away, until he had satisfied himself that the cow was well. If any contagious disease existed in the neighborhood, he could order such precautionary measures as would render the infection of the milk impossible; but if such were not practicable, he could forbid the milkman to send his fluid to market until such time as the danger was past. Loss of license could be the penalty for non-obedience. By this means, if intelligent and capable inspectors were appointed, and would conscientiously perform their duty, the almost unpreventable contamination of milk would be reduced to the lowest possible minimum.

(To be Continued.)

## NEWS AND MISCELLANY.

### A Step Backward.

In the English House of Commons, on February 7th, notices were given of the intended introduction of the following bills: 1. Abolishing the compulsory clauses of the vaccination acts; 2. For the total abolition of vivisection; 3. For the repeal of the Contagious Diseases Act.

### Half Knowledge.

*The American Practitioner* says: "Our American atmosphere is vocal with the flippant loquacity of half knowledge. We must accept whatever good can be got out of it, and keep it under, as we do sorrell, and mullein, and witch-grass, by enriching the soil and sowing good seed in plenty; by good teaching and good books, rather than by wasting our time in talking against it. Half knowledge dreads nothing but whole knowledge."

### A Narrow-minded Physician.

Dr. Oliver Wendell Holmes says: "I have known a practitioner—perhaps more than one—who was as much under the dominant influence of the last article he had read in his favorite medical journal, as a milliner under the sway of the last fashion plate. The difference between green and seasoned knowledge is very great, and such practitioners never hold long enough to any of their knowledge to have it get seasoned."

### The America of the Future.

The same facile writer says: "As the wine of old vintages is gently decanted out of its cobwebbed bottles, with their rotten corks, into clean, new receptacles, so the wealth of the new world is quietly emptying many of the libraries and galleries of the old world into its newly formed collections and newly raised edifices. No Englishman will be offended if I say that before the New Zealander takes his stand on a broken arch of London Bridge, to sketch the ruins of St.

Paul's, in the midst of a vast solitude, the treasures of the British Museum will have found a new shelter in the halls of New York or Boston. No Catholic will think hardly of my saying that before the Coliseum falls, and with it the imperial city, whose doom prophecy has linked with that of the almost eternal amphitheatre, the bronzes, the paintings, the marble, the manuscripts of the Vatican will have left the shores of the Tiber for those of the Potomac, the Hudson, the Mississippi, or the Sacramento.

### Pharmaceutical Preparations.

#### OBSERVATIONS ON THE DIGESTIVE FERMENTS.

Dr. William Roberts, in the *British Medical Journal*, says: "If properly prepared, malt extracts are rich in diastase, and have a high power in digesting starchy matters. But you will be surprised to learn, as I was, that a large proportion of the malt extracts of commerce have no action on starch. This is owing to a high temperature having been used in their preparation. Any heat above 150° Fahr. is destructive to diastase in solution; so that if the extract be evaporated, as is directed by the German Pharmacopœia, at a temperature of 212° Fahr., it is necessarily inert on starch. Out of fourteen trade samples of malt extract examined by Messrs. Dunston & Dimmock, only three possessed the power of acting on starch. These brands were Maltine, Corbyn, Stacy & Co.'s Extract, and Keppler's Malt Extract."

### Items.

—The estate of a rich man is hallowed ground to the lawyers, and they will travel for hundreds of miles to prey upon it.

—Terra alba, or white earth, is used to adulterate white sugars, cream of tartar, and other commonly used articles. Its use tends to produce disease of the kidneys, bladder and stomach.

—Some men are inconsistent creatures. They will get up in the middle of the night and throw their boots at a dog because he is howling at the moon, and the next night pay five dollars a seat to hear Italian opera.

—The tower of the beautiful old church at Hempstead, in Essex, in which repose the remains of the immortal Harvey, has crumbled and fallen to the ground. Dr. Benjamin Ward Richardson is soliciting subscriptions to rebuild it.

—A Milwaukee naturalist stated in his lecture that a black bear could hug seven times as hard as a man, and the next time a menagerie visited the town every girl in the crowd made eyes and waved her handkerchief at the black bear, and paid him so much attention that he got confused and blushed.

—The new officers of the Philadelphia County Medical Society are: President, H. Y. Evans; vice presidents, Charles K. Mills, John B. Roberts; treasurer, William M. Welch; recording secretary, Henry Leffman; reporting secretary, Frank Woodbury; corresponding secretary, H. Augustus Wilson; assistant secretary, J. D. Nash, and librarian, M. O'Hara.

## OBITUARY NOTICES.

## JOSEPH PANCOAST, M.D.,

On March 7th, 1882, Joseph Pancoast, M.D., Emeritus Professor of Anatomy in Jefferson Medical College, died, at his residence, No. 1030 Chestnut street, of pneumonia, having reached his seventy-seventh year. His illness was of very short duration. He became prostrated, and his suffering from congestion of the lungs was acute. His condition steadily grew worse, death finally coming to his relief. He was attended by his son, Dr. William H. Pancoast, and Dr. Da Costa.

Dr. Pancoast was born in the year 1805, in Burlington county, New Jersey. Adopting the profession of medicine and surgery, he studied the same at the University of Pennsylvania, and graduated in 1828, with the degree of M.D. He at once commenced practice and made surgery his specialty. He began teaching practical anatomy and surgery in 1831, and during the same year edited a "Treatise on the Structure, Functions, and Diseases of the Human Sympathetic Nerve," by J. Frederick Lobstein. In 1834, he was elected one of the physicians of the Philadelphia Hospital; shortly afterwards, physician-in-chief of the children's hospital in the same institution; and from 1838 to 1845 he was one of the visiting surgeons to the same hospital. In 1838 he was elected Professor of Surgery in the Jefferson Medical College, succeeding Dr. George McClellan. In 1844 he published his "Treatise on Operative Surgery," which he revised and enlarged in 1852, when it had passed to a third edition. During the first nine years of its existence 4000 were sold. He also, in 1844, remodeled the able work (originally written by Dr. Caspar Wistar, to which the late Professor William E. Horner had made valuable additions), entitled "A System of Anatomy for the Use of Students." On March 27th, 1854, he was elected one of the surgeons of the Pennsylvania Hospital, and resigned that position on February 29th, 1864; in 1861, Professor of Anatomy in Jefferson Medical College, from which he resigned in June, 1873, his son, Dr. William H. Pancoast, succeeding him. Directly after his resignation, Dr. Pancoast was elected Emeritus Professor of Anatomy.

He filled for a period of thirty six years, successively, two of the most important chairs in that celebrated school. He also edited, at sundry times, "Manee on the Great Sympathetic Nerve," and the "Cerebro-Spinal System in Man," by the same author, and subsequently "Quain's Anatomical Plates." He was a voluminous contributor to the *American Journal of the Medical Sciences*, the *American Medical Intelligencer*, and the *Medical Examiner*, besides publishing various monographs, both pathological and surgical, and, at the time, the novel department of plastic surgery. He also published sundry essays and introductory letters to his class; the one of 1865 is entitled "Professional Glimpses Abroad." He was a member of the American Philosophical Society, of the College of Pharmacy and other scientific institutions. He was an eminent surgeon, bold, rapid, and skillful with the use of the knife; and in diagnosis almost invariably correct.

Among the many new operations devised by him was one for soft and mixed cataracts upon the eye; in 1841, a new process for removing cystic tumors: a quick process for correcting strabismus. He afterwards demonstrated that after the eyebrow had been destroyed a good-looking substitute could be made by raising a flap of the scalp, with the soft, drooping hairs of the temple, and giving it a long pedicle, to run in a bed cut for it up to the brow. He four times performed, with success, a lumbar operation for large abscesses lying in the connective tissue between the colon and cæcum and the front of the quadratus muscle. Later, he found that by cutting the post-rior muscles of the velum palati at a certain point, a voice that was unintelligible could often be restored. He was the originator of the operation for the relief of atrophy of the bladder; performing it first in 1868, and it has since been followed here and in Europe. Amputations at the hip joint or even high up on the thigh, were formerly very fatal operations, from the excessive loss of blood. Far more patients died than recovered from these operations. Dr. Pancoast devised a plan to prevent this by using the abdominal tourniquet, with a large roller compress over the lower end of the aorta, so as to shut off all the arterial blood from the lower limbs.

He found by trial that the patients could respire freely with this pressure, under ether, so as to give all necessary time for the operation. In June, 1860, he performed this operation on a large, muscular man at the Pennsylvania Hospital, and the patient lost but three ounces of blood, and rapidly recovered. His plan is now followed in all such cases in this country. In fact, it is now almost the fixed process.

There are cases of tic douloureux, involving all the branches of the second and third divisions of the fifth pair of nerves, producing for months and years horrible suffering, and for which there is no relief but the division of the trunks of these nerves, as they come out of their foramina, at the base of the skull. He devised a plan which he has successfully practiced and which has never failed of giving relief to the sufferer. Few men have contributed so many processes to the surgical profession as the great anatomist who has just passed away.

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**QUERIES AND REPLIES.**

*Dr. J. L. B.* asks our correspondents "What proportion of men among their patients are affected with stricture of the urethra."

*Dr. J. W. McC.* You will find your query answered in "Special Report" No. 111, in our issue of March 4th.

*H. N.* You can vaccinate a person who has eczema, without fear of any bad results.

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**MARRIAGES.**

**BURTON-STURTEVANT.**—At Dover, Massachusetts, October 26th, 1881, by Rev. C. C. Sewall, Dr. C. W. Hurton, of Adams, Massachusetts, and Miss Isabel Sturtevant, of Dover.

**EMERICK-VORIS.**—February 23d, 1882, at the residence of the bride's father, Gilbert Voris, Esq., near Potts' Grove, Pennsylvania, by the Rev. H. G. Finney; H. M. Emerick, M.D., and Annie M. Voris.